The Calendar

OF THE

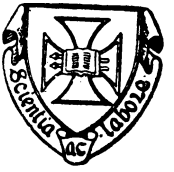
University of Queensland

PART II.

FOR THE YEAR

. . 1934 . .

NOTE.—Every Student should provide himself with the current issue of each part of the Calendar.



Editor: T. E. JONES, B.A.

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PART II.

TABLE OF CONTENTS.

CALENDAR

OF THE

UNIVERSITY OF QUEENSLAND.

(JANUARY) 1934—1935 (MARCH).

1934.

Examination Period begins—Monday, 19th February.

First Term begins—Monday, 5th March.
Union Council meets—Thursday, 15th March.
Easter Sunday—1st April.
Senate meets—Friday, 6th April.
Degree Day—Friday, 13th April.
Union Council meets—Thursday, 19th April.
Anzac Day—Wednesday, 25th April.
Union Council meets—Thursday, 10th May.
Senate meets—Friday, 11th May.
Term ends—Saturday, 19th May.

King's Birthday—Sunday, 3rd June.

Second Term begins—Tuesday, 5th June.
Union Council meets—Thursday, 7th June.
Senate meets—Friday, 29th June.
Union Council meets—Thursday, 12th July.
Senate meets—Friday, 3rd August.
Term ends—Saturday, 4th August.

Third Term begins—Monday, 27th August.
Union Council meets—Thursday, 30th August.
Senate meets—Friday, 21st September.
Union Council meets—Thursday, 27th September.
Union Council meets—Thursday, 18th October.
Senate meets—Friday, 26th October.
Term ends—Tuesday, 30th October.

Examination Period begins—Friday, 2nd November.
Senate meets—Friday, 7th December.

University closed from 22nd December to 7th January, 1935.

1935.

Examination Period begins—Monday, 25th February.

First Term begins—Monday, 11th March.

CLOSING DATES.

1934.

Matriculation (Supplementary and Adult) entries ..	10th January.
Enrolments for 1934	31st January.
Theses—Fourth-year Agriculture	12th February.
Archibald Scholarship	19th February.
Theses—M.A. Degree	19th February.
First-term Fees	3rd March.
Scholarship in Engineering	14th March.
Research Scholarship	14th March.
Travelling Scholarship	14th March.
Free Passages to Europe	14th March.
Engineering Fellowship (W. and E. Hall) ..	14th March.
Late Enrolments	17th March.
Applications for Admission to Degrees	23rd March.
Second-term Fees	2nd June.
Morrow Prize	4th August.
Ford Memorial Medal	4th August.
Third-term Fees	31st August.
Examination Entries and Fees	31st August
Rhodes Scholarship	29th September.
Raff Memorial Scholarship	31st October.
Kate McNaughton of Roma Scholarship	31st October.
Duncan McNaughton Scholarship	31st October.

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

January XXXI.

1	M	First Monday of Year.	1
2	T		
3	W		
4	Th		
5	F		
6	S		
7	**S**		
8	M	Second Monday of Year.	2
9	T		
10	W	Last day for receipt of entries for Supplementary and Adult Matriculation Examinations to be held in February.	
11	Th		
12	F		
13	S		
14	**S**		
15	M	Third Monday of Year.	3
16	T		
17	W		
18	Th		
19	F		
20	S		
21	**S**		
22	M	Fourth Monday of Year.	4
23	T		
24	W		
25	Th		
26	F		
27	S		
28	**S**		
29	M	Fifth Monday of Year.	5
30	T		
31	W	Last day for receipt of completed forms of enrolment for University courses for 1934.	

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

February, XXVIII.

1	Th		
2	F		
3	S		
4	**S**		
5	M	Sixth Monday of Year Joint Board of Dental Studies meets, 8 p.m.	6
6	T		
7	W		
8	Th		
9	F		
10	S		
11	**S**		
12	M	Seventh Monday of Year. Supplementary Matriculation and Adult Matriculation Examinations Last day for receipt of Theses from Fourth-Year Students in Agriculture.	7
13	T		
14	W		
15	Th		
16	F		
17	S		
18	**S**		
19	M	Eighth Monday of Year. **First Examination Period Begins.** Supplementary Degree Examination. Final Honours Examination. Last day for receipt of Essays for Archibald Scholarship. Last day for receipt of Theses from Candidates for M.A. Degree.	8
20	T		
21	W		
22	Th		
23	F		
24	S		
25	**S**		
26	M	Ninth Monday of Year.	9
27	T		
28	W		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

March XXXI. 1934.

1	Th		
2	F		
3	S	First-term fees of all students to be paid and duplicate deposit slip lodged at the Office on or before this date.	
4	**S**		
5	M	Tenth Monday of Year. **First Term Begins.** Faculty of Arts meets, 2 p.m. Joint Board of Dental Studies meets, 8 p.m.	**10**
6	T	Faculty of Commerce meets, 4 p.m.	
7	W	Faculty of Science meets, 2 p.m.	
8	Th	Faculty of Engineering meets, 2 p.m.	
9	F	Faculty of Agriculture meets, 4 p.m.	
10	S		
11	**S**		
12	M	Eleventh Monday of Year.	**11**
13	T		
14	W	Board of Faculties meets, 2 p.m. Last day for receipt of applications for *Scholarship in Engineering, and for *Scholarship for Encouragement of Original Research. Last day for receipt of applications for *Foundation Travelling Scholarship, and for Free Passages to Europe. Last day for receipt of applications for Walter and Eliza Hall Engineering Fellowship (every Third Year).	
15	Th	Union Council meets, 7.30 p.m.	
16	F		
17	S	Late applications for enrolment, or applications to alter courses already approved, will not be entertained after this date.	
18	**S**		
19	M	Twelfth Monday of Year. Combined Advisory Committee meets, 4.30 p.m.	**12**
20	T	Education Committee meets, 4 p.m.	
21	W	Library Committee meets, 4 p.m.	
22	Th	Buildings and Grounds Committee meets, 4 p.m.	
23	F	Last day for receipt of applications for admission to Degrees at Ceremony to be held on the 13th April.	
24	S		
25	**S**		
26	M	Thirteenth Monday of Year. Administrative Committee meets, 3.30 p.m. Finance Committee meets, 4 p.m.	**13**
27	T		
28	W		
29	Th	University closed from 5 p.m. to 9 a.m. on Tuesday, 3rd April.	
30	F	Good Friday.	
31	S	Easter Eve.	

* The award of these Scholarships in 1934 will be subject to the necessary funds being available therefor.

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

April XXX.

1	**S**	Easter Sunday.	
2	M	Fourteenth Monday of Year.	**14**
		Easter Monday.	
3	T		
4	W		
5	Th		
6	F	Senate meets, 4 p.m.	
7	S		
8	**S**		
9	M	Fifteenth Monday of Year.	**15**
10	T		
11	W		
12	Th		
13	F	Degree Day.	
14	S		
15	**S**		
16	M	Sixteenth Monday of Year.	**16**
17	T	Faculty of Arts meets, 2 p.m.	
		Faculty of Commerce meets, 4 p.m.	
18	W	Faculty of Science meets, 2 p.m.	
19	Th	Faculty of Engineering meets, 2 p.m.	
		Union Council meets, 7.30 p.m.	
20	F	Faculty of Agriculture meets, 4 p.m.	
21	S		
22	**S**		
23	M	Seventeenth Monday of Year.	**17**
		Combined Advisory Committee meets, 4.30 p.m.	
		Joint Board of Dental Studies meets, 8 p.m.	
24	T		
25	W	Anzac Day.—University closed.	
26	Th	Board of Faculties meets, 2 p.m.	
27	F		
28	S		
29	**S**		
30	M	Eighteenth Monday of Year.	**18**

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

May XXXI.

1	T	Education Committee meets, 4 p.m.	
2	W	Library Committee meets, 4 p.m.	
3	Th	Buildings and Grounds Committee meets, 4 p.m.	
4	F		
5	S		
6	**S**		
7	M	Nineteenth Monday of Year.	**19**
		Administrative Committee meets, 3.30 p.m.	
		Finance Committee meets, 4 p.m.	
8	T		
9	W		
10	Th	Union Council meets, 7.30 p.m.	
11	F	Senate meets, 4 p.m.	
12	S		
13	**S**		
14	M	Twentieth Monday of Year.	**20**
15	T		
16	W		
17	Th		
18	F		
19	S	**First Term Ends.**	
20	**S**		
21	M	Twenty-first Monday of Year.	21
22	T		
23	W	Vacation.	
24	Th		
25	F		
26	S		
27	**S**		
28	M	Twenty-second Monday of Year.	22
29	T	Vacation.	
30	W		
31	Th		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

June XXX.

1	F	Vacation.	
2	S	Fees for second term to be paid and duplicate deposit slip lodged at the Office on or before this day.	
3	**S**	King's Birthday.	
4	M	Twenty-third Monday of Year. University closed.	23
5	T	**Second Term Begins.** Faculty of Arts meets, 2 p.m. Joint Board of Dental Studies meets, 8 p.m.	
6	W	Faculty of Science meets, 2 p.m.	
7	Th	Faculty of Engineering meets, 2 p.m. Union Council meets, 7.30 p.m.	
8	F	Faculty of Agriculture meets, 4 p.m.	
9	S		
10	**S**		
11	M	Twenty-fourth Monday of Year.	24
12	T		
13	W	Board of Faculties meets, 2 p.m.	
14	Th		
15	F		
16	S		
17	**S**		
18	M	Twenty-fifth Monday of Year. Combined Advisory Committee meets, 4.30 p.m.	25
19	T	Education Committee meets, 4 p.m.	
20	W	Library Committee meets, 4 p.m.	
21	Th	Buildings and Grounds Committee meets, 4 p.m.	
22	F		
23	S		
24	**S**		
25	M	Twenty-sixth Monday of Year. Administrative Committee meets, 3.30 p.m. Finance Committee meets, 4 p.m.	26
26	T		
27	W		
28	Th		
29	F	Senate meets, 4 p.m.	
30	S		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

July XXXI.

1	S		
2	M	Twenty-seventh Monday of Year.	27
3	T		
4	W		
5	Th		
6	F		
7	S		
8	S		
9	M	Twenty-eighth Monday of Year.	28
		Faculty of Arts meets, 2 p.m.	
		Joint Board of Dental Studies meets, 8 p.m.	
10	T	Faculty of Commerce meets, 4 p.m.	
11	W	Faculty of Science meets, 2 p.m.	
12	Th	Faculty of Engineering meets, 2 p.m.	
		Union Council meets, 7.30 p.m.	
13	F	Faculty of Agriculture meets, 4 p.m.	
14	S		
15	S		
16	M	Twenty-ninth Monday of Year.	29
17	T		
18	W	Board of Faculties meets, 2 p.m.	
19	Th		
20	F		
21	S		
22	S		
23	M	Thirtieth Monday of Year.	30
24	T	Education Committee meets, 4 p.m.	
25	W	Library Committee meets, 4 p.m.	
26	Th	Buildings and Grounds Committee meets, 4 p.m.	
27	F		
28	S		
29	S		
30	M	Thirty-first Monday of Year.	31
		Administrative Committee meets, 3.30 p.m.	
		Finance Committee meets, 4 p.m.	
31	T		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

August XXXI.

1	W		
2	Th		
3	F	Senate meets, 4 p.m.	
4	S	**Second Term Ends.** Last day for receipt of Essays for Thomas Morrow Prize, and of competing poems for Ford Memorial Medal.	
5	**S**		
6	M	Thirty-second Monday of Year. Brisbane Exhibition opens.	32
7	T		
8	W	Vacation.	
9	Th		
10	F		
11	S		
12	**S**		
13	M	Thirty-third Monday of Year.	33
14	T		
15	W	Vacation.	
16	Th		
17	F		
18	S		
19	**S**		
20	M	Thirty-fourth Monday of Year.	34
21	T		
22	W	Vacation.	
23	Th		
24	F		
25	S		
26	**S**		
27	M	Thirty-fifth Monday of Year. **Third Term Begins.** Faculty of Arts meets, 2 p.m. Joint Board of Dental Studies meets, 8 p.m.	35
28	T	Faculty of Commerce meets, 4 p.m.	
29	W	Faculty of Science meets, 2 p.m.	
30	Th	Faculty of Engineering meets, 2 p.m. Union Council meets, 7.30 p.m.	
31	F	Faculty of Agriculture meets, 4 p.m. Last day for receipt of entries for the Annual (Degree) Examination to be held in November, 1934, and for Final Honours Examination to be held in February, 1935. Duplicate deposit slips showing that combined fees for Third Term and examination have been paid must be lodged at the Office before this date.	

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

September XXX.

1	S		
2	**S**		
3	M	Thirty-sixth Monday of Year.	36
4	T		
5	W	Board of Faculties meets, 2 p.m.	
6	Th		
7	F		
8	S		
9	**S**		
10	M	Thirty-seventh Monday of Year.	37
11	T	Education Committee meets, 4 p.m.	
12	W	Library Committee meets, 4 p.m.	
13	Th	Buildings and Grounds Committee meets, 4 p.m.	
14	F		
15	S		
16	**S**		
17	M	Thirty-eighth Monday of Year.	38
		Administrative Committee meets, 3.30 p.m.	
		Finance Committee meets, 4 p.m.	
18	T		
19	W		
20	Th		
21	F	Senate meets, 4 p.m.	
22	S		
23	**S**		
24	M	Thirty-ninth Monday of Year.	39
25	T		
26	W		
27	Th	Union Council meets, 7.30 p.m.	
28	F		
29	S	Last day for receipt of applications for Queensland Rhodes Scholarship for 1935.	
30	**S**		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

October XXXI.

1	M	Fortieth Monday of Year.	40
		Faculty of Arts meets, 2 p.m.	
		Joint Board of Dental Studies meets, 8 p.m.	
2	T	Faculty of Commerce meets, 4 p.m.	
3	W	Faculty of Science meets, 2 p.m.	
4	Th	Faculty of Engineering meets, 2 p.m.	
5	F	Faculty of Agriculture meets, 4 p.m.	
6	S		
7	S		
8	M	Forty-first Monday of Year.	41
9	T		
10	W	Board of Faculties meets, 2 p.m.	
11	Th		
12	F		
13	S		
14	S		
15	M	Forty-second Monday of Year.	42
		Combined Advisory Committee meets, 4.30 p.m.	
16	T	Education Committee meets, 4 p.m.	
17	W	Library Committee meets, 4 p.m.	
18	Th	Buildings and Grounds Committee meets, 4 p.m.	
		Union Council meets, 7.30 p.m.	
19	F		
20	S		
21	S		
22	M	Forty-third Monday of Year.	43
		Administrative Committee meets, 3.30 p.m.	
		Finance Committee meets, 4 p.m.	
23	T		
24	W		
25	Th		
26	F	Senate meets, 4 p.m.	
27	S		
28	S		
29	M	Forty-fourth Monday of Year.	44
30	T	**Third Term ends.**	
31	W	Last day for receipt of entries for Raff Memorial Scholarship.	
		Last day for receipt of applications for the Kate McNaughton of Roma Scholarship and Duncan McNaughton Scholarship.	

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

November XXX.

1	Th	**Second Examination Period Begins.**	
2	F		
3	S		
4	**S**		
5	M	Forty-fifth Monday of Year.	45
6	T		
7	W		
8	Th		
9	F		
10	S		
11	**S**		
12	M	Forty-sixth Monday of Year.	46
		Joint Board of Dental Studies meets, 8 p.m.	
13	T		
14	W		
15	Th		
16	F		
17	S		
18	**S**		
19	M	Forty-seventh Monday of Year.	47
20	T		
21	W		
22	Th		
23	F		
24	S		
25	**S**		
26	M	Forty-eighth Monday of Year.	48
27	T		
28	W		
29	Th		
30	F		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1934.

December XXXI.

1	S		
2	**S**		
3	M	Forty-ninth Monday of Year. Administrative Committee meets, 3.30 p.m. Finance Committee meets, 4 p.m.	**49**
4	T		
5	W		
6	Th		
7	F	Senate meets, 4 p.m.	
8	S	Last day for receipt of entries for Supplementary Degree Examination to be held in February, 1935.	
9	**S**		
10	M	Fiftieth Monday of Year. Joint Board of Dental Studies meets, 8 p.m.	**50**
11	T		
12	W		
13	Th		
14	F		
15	S		
16	**S**		
17	M	Fifty-first Monday of Year.	**51**
18	T		
19	W		
20	Th		
21	F		
22	S	University closed till 7th January, 1935.	
23	**S**		
24	M	Fifty-second Monday of Year.	**52**
25	T	Christmas Day	
26	W		
27	Th		
28	F		
29	S		
30	**S**		
31	M	Fifty-third Monday of Year.	**53**

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1935.

January XXXI.

1	T		
2	W		
3	Th		
4	F		
5	S		
6	**S**		
7	M	First Monday of Year.	1
8	T		
9	W	Last day for receipt of entries for Supplementary and Adult Matriculation Examinations to be held in February.	
10	Th		
11	F		
12	S		
13	**S**		
14	M	Second Monday of Year.	2
15	T		
16	W		
17	Th		
18	F		
19	S		
20	**S**		
21	M	Third Monday of Year.	3
22	T		
23	W		
24	Th		
25	F		
26	S		
27	**S**		
28	M	Fourth Monday of Year.	4
29	T		
30	W		
31	Th	Last day for receipt of completed forms of enrolment for University courses for 1935.	

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1935.

February XXVIII.

1	F		
2	S		
3	S		
4	M	Fifth Monday of Year.	5
		Joint Board of Dental Studies meets, 8 p.m.	
5	T		
6	W		
7	Th		
8	F		
9	S		
10	S		
11	M	Sixth Monday of Year.	6
		Supplementary Matriculation and Adult Matriculation Examinations.	
		Last day for receipt of Theses from Fourth Year Students in Agriculture.	
12	T		
13	W		
14	Th		
15	F		
16	S		
17	S		
18	M	Seventh Monday of Year.	7
		Last day for receipt of Essays for Archibald Scholarship.	
19	T		
20	W		
21	Th		
22	F		
23	S		
24	S		
25	M	Eighth Monday of Year.	8
		First Examination Period Begins.	
		Supplementary Degree Examination.	
		Final Honours Examination.	
		Last day for receipt of Theses from Candidates for M.A. Degree.	
26	T		
27	W		
28	Th		

CALENDAR OF THE UNIVERSITY OF QUEENSLAND.

1935.

March XXXI.

1	F	
2	S	
3	**S**	
4	M	Ninth Monday of Year. **9**
5	T	
6	W	
7	Th	
8	F	
9	S	First-term fees of all students to be paid and duplicate deposit slip lodged at the Office on or before this date.
10	**S**	
11	M	**Tenth Monday of Year.** **10** **First Term Begins.** Faculty of Arts meets, 2 p.m. Joint Board of Dental Studies meets, 8 p.m.
12	T	Faculty of Commerce meets, 4 p.m.
13	W	Faculty of Science meets, 2 p.m.
14	Th	Faculty of Engineering meets, 2 p.m. Last day for receipt of applications for *Scholarship in Engineering, and for *Scholarship for Encouragement of Original Research. Last day for receipt of applications for *Foundation Travelling Scholarship, and for Free Passages to Europe. Last day for receipt of applications for Walter and Eliza Hall Engineering Fellowship† (every Third Year).
15	F	
16	S	
17	**S**	
18	M	Eleventh Monday of Year. **11**
19	T	
20	W	Board of Faculties meets, 2 p.m.
21	Th	Union Council meets, 7.30 p.m.
22	F	
23	S	Late applications for enrolment, or applications to alter courses already approved, will not be entertained after this date.
24	**S**	
25	M	**Twelfth Monday of Year.** **12** Combined Advisory Committee meets, 4.30 p.m.
26	T	Education Committee meets, 4 p.m.
27	W	Library Committee meets, 4 p.m.
28	Th	Buildings and Grounds Committee meets, 4 p.m.
29	F	Last day for receipt of applications for admission to Degrees at Ceremony to be held on the 5th April.
30	S	
31	**S**	

Easter Sunday, 21st April, 1935.

* The award of these Scholarships in 1935 will be subject to the necessary funds being available therefor.

† The next award of this Fellowship will be made in March, 1937.

OFFICERS OF THE UNIVERSITY.

CHANCELLOR:

The Honourable Sir James William Blair, Chief Justice.

VICE-CHANCELLOR:

William Nathaniel Robertson, C.B.E., M.B., C.M., F.R.A.C.S., F.C.S.A.

THE SENATE OF THE UNIVERSITY:

Professor Henry Alcock, M.A.
Anna Frederica Bage, M.Sc.
Theo. John Bale, B.A.
Frederick Bennett, B.Sc.
The Honourable Sir James William Blair, Chief Justice.
Robert Joseph Carroll.
The Most Reverend James Duhig, D.D.
Lewis David Edwards, M.A.
John Lockhart Gibson, M.D., F.R.A.C.S.
John Brownlie Henderson, O.B.E., F.C.S., F.I.C.
Thomas Llewellyn Jones.
William Mandeville Ellis L'Estrange.
Bernard Joseph McKenna.
Alexander Clifford Vernon Melbourne, M.A., Ph.D.
Professor Thomas Parnell, M.A.
The Reverend William Christopher Radcliffe, B.A.
William Nathaniel Robertson, C.B.E., M.B., C.M., F.R.A.C.S., F.C.S.A.
Edwin John Droughton Stanley, M.A.
John Douglas Story, I.S.O.

NOTE.—The above will retire on the 28th February, 1935. An election of members of the Senate by the Council will take place in February, 1935.

STANDING COMMITTEES.

The Standing Committees are appointed at the first meeting of the Senate held after the first Tuesday in March in each year.

NOTE.—The Chancellor and Vice-Chancellor are *ex officio* members of all Standing Committees.

EDUCATION COMMITTEE:

Chairman: The Vice-Chancellor.

The Education Committee consists of the several members of the Senate and the Deans of the several Faculties as associate members.

ADMINISTRATIVE COMMITTEE:

Chairman: Mr. Story.

Mr. Bale, Mr. Bennett, Mr. Carroll, Dr. Lockhart Gibson, Mr. Jones, and Mr. Stanley.

BUILDINGS AND GROUNDS COMMITTEE.

Chairman: Mr. L'Estrange.

Professor Alcock, Miss Bage, Archbishop Duhig, Mr. Henderson, Mr. McKenna, Dr. Melbourne, and Professor Parnell.

Associate Members: Professor Hawken; Mr. W. E. Bush, M.Inst.C.E., M.Inst.E. (Aust.), F.R. (Fan.) Inst.; Mr. A. B. Leven.

FINANCE COMMITTEE:

Chairman: Mr. Story.

Mr. Bale, Mr. Bennett, Mr. Carroll, Dr. Lockhart Gibson, Mr. Jones, and Mr. L'Estrange.

LIBRARY COMMITTEE:

Chairman: Mr. Henderson.

Professor Alcock, Archbishop Duhig, Mr. McKenna, Dr. Melbourne, Professor Parnell, and Rev. W. C. Radcliffe.

Associate Members: The Deans of the Faculties and Professor Cumbrae-Stewart.

COMBINED ADVISORY COMMITTEE:

Chairman: Mr. L'Estrange.

Senate Representatives: Professor Alcock, Miss Bage, Mr. Edwards, and Rev. W. C. Radcliffe.

UNIVERSITY COMMITTEE FOR TUTORIAL CLASSES AND PUBLIC LECTURES:

Chairman: Professor Alcock.

University Representatives: Mr. Edwards, Mr. T. L. Jones, Mr. L'Estrange, and Dr. Melbourne.

AUSTRALIAN BROADCASTING COMMISSION—QUEENSLAND COMMITTEE:
University Representatives: Professors Alcock, Goddard, Parnell, Scott Fletcher, and Stable.

THE COUNCIL OF THE UNIVERSITY.

Warden: The Honourable Thomas Charles Beirne.

TEACHING STAFF.

Emeritus Professor: Bertram Dillon Steele, D.Sc., F.R.S., F.I.C.

PROFESSORS:

Agriculture: 1927, Jack Keith Murray, B.A., B.Sc. Agr.
Biology (McCaughey Professor): 1922, Ernest James Goddard, B.A., D.Sc.
Chemistry: 1931, Lancelot Salisbury Bagster. D.Sc.
Classics: 1910, John Lundie Michie, M.A.
Engineering: 1919, Roger William Hercules Hawken, B.A., M.E., M.Inst.C.E., M.I.E. (Aust.).
English Language and Literature (Darnell Professor): 1922, J. J. Stable, M.A.
Geology and Mineralogy: 1919, Henry Caselli Richards, D.Sc.
History and Economics (McCaughey Professor): 1922, Henry Alcock, M.A.
Law (Garrick Professor): 1925, Francis William Sutton Cumbrae-Stewart, K.C., D.C.L.
Mathematics: 1932, Eugene Francis Simonds, M.A., B.Sc., Ph.D.
Medical Psychology (Research): 1921, James Prain Lowson, M.A., M.D.
Philosophy: 1923, Michael Scott Fletcher, M.A., B.Litt.
Physics: 1919, Thomas Parnell, M.A.; 1922, Sydney Gordon Lusby, M.A., Assistant Professor.

LECTURERS:

Biology: 1920, Albert Cayzer, B.Sc.; 1924, Desmond Andrew Herbert, D.Sc.
Chemistry: 1921, Thomas Gilbert Henry Jones, D.Sc., A.A.C.I.
Chemistry (Agricultural): 1929, Herbert John Garnham Hines, B.Sc.
Civil Engineering: 1921, Cecil Napier Ross, M.Sc., B.M.E.
Classics: 1919, Stanley Castlehow, M.A.
Geology: 1920, Walter Heywood Bryan, D.Sc.
1926, Frederick William Whitehouse, M.Sc., Ph.D.
Economic and Colonial History: 1916, Alexander Clifford Vernon Melbourne, M.A., Ph.D.
Economic Entomology: 1929, Frederick Athol Perkins, B.Sc. Agr.
Economics and History: 1923, John Liddle King Gifford, M.A.
Mathematics: 1931, Ethel Harriet Raybould, M.A.; 1932, James Patrick McCarthy, M.A.

Mechanical and Electrical Engineering: 1919, Arthur Boyd, B.E., D.Sc., M.I.E.E., Assoc.M.Inst.C.E.

Metcorology and Physics: 1921, Travis Rimmer, M.Sc.

Modern Languages: 1922, Frederick Walter Robinson, M.A., Ph.D.; 1922, Charles Schindler, M.A.; 1926, Hannibal Gustav Tommerup, B.A. (Part Time).

Music: 1934, Sydney May (Organiser and Part-Time Lecturer).

Philosophy: 1923, William Marquis Kyle, M.A.

Surveying (Part Time): 1924, Frederick William James, M.Sc.

Building Construction and Architecture (Part Time): F. L. Jones.

DEPARTMENT OF EXTERNAL STUDIES:

Director: 1911, Thomas Edward Jones, B.A. Assistants—1923: Annie Emily Jane Darvall, B.A.; 1931: Marjorie Margaret Cullen Smith, B.A. (Part Time).

CHIEF TUTOR AND DIRECTOR OF WORKERS' TUTORIAL CLASSES:

1921, Bevil Hugh Molesworth, M.A.

SENIOR DEMONSTRATORS AND ASSISTANT LECTURERS:

Engineering: 1913, Andrew Ross Munro, Assoc.M.Inst.C.E., A.M.I.Mech.E.; 1929, Archibald Johnstone McComas Stoney, B.E.E., A.M.I.E. (Aust.).

Chemistry: 1922, Edmund Arthur O'Connor, M.Sc.

Agriculture (Genetics and Plant Breeding): 1931, Wilfred Walter Bryan, B.Sc. Agr.

READERS:

Social Science and Administrative Law: 1932, Thomas Penberthy Fry, M.A., B.C.L., Sc.Jur.D.

Department of Modern Languages: 1933, James Charles Mahoney, B.A., B.Litt.

SCIENTIFIC ASSISTANTS AND DEMONSTRATORS:

Biology: Alick Edwin Mee.

Geology: Albert N. Falk.

Survey Field Work (Part Time): W. Sayers.

SPECIALIST LECTURERS AND INSTRUCTORS:

Faculty of Engineering.

Bridge Design: W. J. Doak, M.Inst.C.E.

Reinforced Concrete: N. C. Aitken, B.E.

Business Methods and Workshop Management: E. H. George, F.I.C.A., F.F.I.A., A.C.I.S.

Railway Signalling: F. G. Nevill.

Sub-station Engineering: L. G. Pardoe, B.E.

Fitting and Machining: W. Armitage.

Electric Welding: A. J. Uscinski, B.E.

Faculty of Commerce.

Accountancy, Auditing, and Commercial and Industrial Organization: E. H. George, F.I.C.A., F.F.I.A., A.C.I.S.; A. F. Hess, B.A., B.Com., F.I.C.A., A.F.I.A.; O. Tuttle, F.I.C.A., A.F.I.A.; J. Packman, A.I.C.A.; I. S. Webley, A.C.I.S., A.L.A.A., A.I.C.A.

Taxation Law and Practice: C. G. McCorkell, A.C.I.S.

Bankruptcy Law, Company Law, Mercantile Law, Law of Trustees: A. J. Mansfield, J. D. C. Story.

Faculty of Agriculture.

Zootechny and Diseases of Animals: A. J. McKenzie, V.S.

Dairying and Dairy Manufactures: R. R. Keats, H.D.D.

Horticulture and Irrigation Practice: J. E. Howie.

Farm Engineering: T. J. Barratt.

Queensland College of Dentistry.

Anatomy: Dr. E. S. Meyers, Dr. Arthur Murphy.

Dental Anatomy: Dr. H. Goldfinch, Dr. A. Livingston.

Dental Mechanics and Prosthetics: Mr. A. Rossiter, Mr. A. Robertson.

Materia Medica: Mr. F. C. Bennett.

Metallurgy: Mr. S. B. Watkins.

Operative Dental Surgery: Mr. A. Rossiter, Mr. C. O. Vidgen.

General Pathology and Bacteriology: Dr. J. V. Duhig.

General Surgery: Dr. A. G. Anderson, Dr. Neville Sutton, Dr. E. S. Meyers.

Anæsthetics: Dr. Ellis Murphy.

Orthodontia: Dr. B. L. Rosenstengel.

Medicine: Dr. Eustace Russell.

Preventive Dentistry and Hygiene: Mr. A. H. Hoole.

Jurisprudence: Mr. J. W. Ward.

Crown and Bridge Work: Dr. C. A. Street.

Inlays and Ceramics: Dr. Boyd Irwin.

Radiography: Dr. A. Livingston.

Advanced Prosthetics: Dr. R. P. Rheuben.

Diseases of Ear, Nose, and Throat: Dr. H. V. Foxton.

THE BOARD OF FACULTIES.

President: Professor Alcock.

The Chancellor and Vice-Chancellor, Professors Alcock, Bagster, Cumbrae Stewart, Goddard, Hawken, Lowson, Michie, Murray, Parnell, Richards, Scott Fletcher, Simonds, and Stable, and for special purposes, Mr. T. E. Jones.

THE FACULTIES.

NOTE.—The Chancellor and Vice-Chancellor are members, *ex officio*, of each Faculty.

THE FACULTY OF ARTS:

Dean of the Faculty: Professor Stable.

Professor Alcock, Mr. F. S. N. Bousfield, Mr. Castlehow,

Professor Cumbrae Stewart, Mr. L. D. Edwards, Professor Scott Fletcher, Mr. Gifford, Mr. T. E. Jones, Mr. Kyle, Mr. McCarthy, Dr. Melbourne, Dr. Robinson, Mr. Schindler, and Professor Simonds.

THE FACULTY OF SCIENCE:

Dean of the Faculty: Professor Richards.

Professor Bagster, Dr. Bryan, Mr. Cayzer, Professors Goddard and Hawken, Dr. Herbert, Dr. T. G. H. Jones, Assistant Professor Lusby, Mr. O'Connor, Professor Parnell, Miss Raybould, Mr. Rimmer, Professor Simonds, and Dr. Whitehouse.

THE FACULTY OF ENGINEERING:

Dean of the Faculty: Professor Hawken.

Professor Bagster, Dr. Boyd, Colonel Evans, D.S.O., M.I.E. Aust., Messrs. J. P. Harvey (Surveyor-General), J. S. Just, M.I.M.E., M.I.E.Aust., J. Kemp, M.Inst.C.E., M.I.E.Aust., Mr. Munro, Professor Parnell, Professor Richards, Mr. Ross, Professor Simonds, and Mr. J. Wilson, B.E., M.Inst.C.E., M.I.E.Aust. (Chairman, Brisbane Division, I.E.A.).

THE FACULTY OF COMMERCE.

Dean of the Faculty: Professor Stable.

Professor Alcock, Mr. E. T. Campbell, Mr. E. H. George, Mr. Gifford, Mr. M. G. Haymen, Dr. Melbourne, Mr. G. K. Seabrook, and Mr. W. J. Tunley.

THE FACULTY OF AGRICULTURE:

Dean of the Faculty: Professor Goddard.

Professor Alcock, Professor Bagster. Mr. J. C. Brünnich, Dr. Bryan, Mr. Cayzer, Mr. A. H. Cory, Mr. H. T. Easterby, Mr. A. E. Graham, Professor Hawken, Dr. Herbert, Mr. Hines, Mr. B. J. McKenna, Mr. J. R. A. McMillan, Mr. Munro, Professor Murray, Professor Parnell, Mr. Perkins, Mr. H. C. Quodling, Mr. W. Ranger, Professor Richards, Mr. R. McL. Riddell, Mr. Rimmer, Professor Simonds, Mr. R. Veitch, and Mr. C. T. White.

THE FACULTY OF LAW:

Members ex officio: The Chief Justice, The Senior Puisne Justice, and The Attorney-General.

THE FACULTY OF MEDICINE:

Dean of the Faculty: The Chancellor.

JOINT BOARD OF DENTAL STUDIES.

Chairman: Professor Goddard.

Members: Professor Bagster, Dr. C. G. H. Barnes, Mr. T. L. Jones, Dr. A. Livingston, Mr. W. R. Parker, Professor Parnell, Mr. C. L. Thompson, Dr. A. R. Walker, and Dr. L. St. V. Welch.

WALTER AND ELIZA HALL BENEFACTION.

FELLOWSHIP.

In Economic Biology: G. Hurlstone Hardy.

ADMINISTRATIVE AND CLERICAL STAFFS.

REGISTRAR: Joseph Francis McCaffrey.

LIBRARIAN: Vacant.

ASSISTANT LIBRARIAN (in charge): Ellen Katherine McIver.

ACCOUNTANT: John Dougal Cramb.

CHIEF OFFICE—

Accounts Section.—Clerk: Ivan William Stephensen. Storeman and Clerk: Valentine Ward. Junior Clerk: Louis Livingstone. Stenotypist: Ellen Gleeson.

Correspondence, Enquiries, and Records Section.—Clerk in Charge: Thelma Atkin. Stenotypists: Dorothy Emslie Watt, Mary Lyons. Record Attendant: Bruce Green.

Examinations Section: Clerk in Charge: Isabel Hurwood. Stenotypist: Helen Menzies Cunningham.

Telephone Attendant: Margaret Irwin.

Janitor: Walter Wyche.

Office Attendant: Ronald Hann.

OTHER DEPARTMENTS—

Biology.—Stenotypists and Clerks: Marjorie Scott Hobson. Agnes Gladys Henry.

Chemistry.—Stock Attendant and Clerk: Vida Dabbs.

External Studies.—Senior Stenotypist and Clerk: Dorothy Mabel Jones. Stenotypist: Sylvia Blanche Pickering.

Engineering.—Stenotypist and Clerk: Jean Gillies.

Geology.—Stenotypist and Clerk: Mary McCarthy.

Library.—Attendant: Kathleen Marguerite St. John.

Workers' Tutorial Classes.—Senior Stenotypist and Clerk: Alathea Florence Browne.

LABORATORY STAFF.

LABORATORY MECHANICS—

Applied Chemistry: Alfred Charles Braddy.

Chemistry: Charles Illidge.

Engineering: C. H. Mapp and P. N. Humphreys.

Physics: Robert Gibb.

LABORATORY ASSISTANTS—

Agriculture: David Jones.

Biology: Clarence Illidge.

Engineering: Lionel Dennis Byrne and Victor Edward Darra.

Physics: John Jennings.

CHANGES IN CALENDAR, PART I.

RULES FOR DEGREE OF BACHELOR OF ARTS.

To Group (*g*), on page 48, *add* "Music."

Clause 5 (*d*), on page 49, *to read*—

"Not less than one subject be taken from Groups E and F together, unless three subjects be taken from Group H."

BACHELOR OF APPLIED SCIENCE IN INDUSTRIAL CHEMISTRY (HONOURS).

Clause 4, on page 63, *to read*—

"Candidates may present themselves for examination at any time not less than one year, and not more than two years, from the date on which they entered for the first time on the fourth year of their course."

BACHELOR OF ENGINEERING.

On page 65, *after* the last paragraph in Section 5, *insert* the following:—

"*Note.*—For Evening Course in First and Second Year Engineering, see page 78."

On page 66—The following to be inserted at the top of the page:—"During the year students shall complete one term of Laboratory work in Heat Engines."

On page 66—In the Regulations for Third-year Mechanical and Electrical Engineering, *add* the modification "excluding Astronomy" to the subject "Surveying, Part I."

On page 67—In the Mechanical and Electrical Engineering Regulation for Fourth Year, after the list of subjects in paragraph 9, *add* "During the August Vacation, candidates will attend one week's Surveying Camp."

On page 67—Under the heading "Chemical Engineering" in paragraph 12, "Surveying, Part I., excluding Astronomy," *to replace* "Economic Geology."

On page 68, the following paragraphs to be inserted between 13 and 14:—

"MINING ENGINEERING.

"*Third Year.*

"14. Candidates who have completed their second year may proceed to the third year of their course. Such candidates shall pass in the following subjects:—

Engineering Chemistry;
Geology, Part II.;
Civil Engineering, Part I., Testing of Materials, as prescribed for Students in Mining Engineering;
Surveying, Part I.;
Hydraulics, Part I.;
Engineering Drawing and Design III.

During the vacation between the third and fourth years of their course, candidates shall engage in approved work in the field.

"Candidates who have fulfilled the foregoing conditions shall thereby complete their third year.

"*Fourth Year.*†

"15. Candidates who have completed their third year may proceed to the fourth year of their course. Such candidates shall pass in the following subjects:—

Mining Engineering;
Electrical Engineering, as prescribed for Students in Mining Engineering;
Assaying;
Metallurgy;
Engineering Drawing and Design IV.

During the vacation at the end of their fourth year, candidates shall engage in practical work at an approved mine or carry out such laboratory work as may be prescribed in each case.

"Candidates who have fulfilled the foregoing conditions shall thereby complete their fourth year.

"† *Note.*—At present the fourth-year work must be done at another Australian University."

On page 91, paragraph III. to read—

"The Scholarships shall be open to—

(*a*) Evening students of the Faculty of Engineering who have completed the work entitling them, and who intend, to enter the third year of the course for the Degree of Bachelor of Engineering as day students;

(*b*) As before;

(*c*) Half-time students. Students from Government Departments or elsewhere who propose to attend an approved course involving a portion of the third year may be granted a proportion of the Scholarship."

BACHELOR OF COMMERCE—PASS DEGREE.

Scheme of Study.

1. Subject to the provisions of the Statute relating to the Degree of Bachelor of Commerce, the course of study for the Degree shall extend over a period of not less than three completed academic years. Subjects selected from the following Groups shall be studied by candidates for the Degree:—

Group A—

Modern History; Economics (Part I., Part II., Part II.A); Accounting (Section I., Section II.).

Group B—

English (Part I., Part II.); French (Part I., Part II.); German (Part I., Part II.); Philosophy (Part I., Part II., Part II.A).

Group C—

Commercial and Industrial Organization; Auditing; Taxation Law and Practice; Company Law; Mercantile Law; Law of Bankruptcy and Law of Trustees.

Group D—

Public International Law; Constitutional History and Political Science (Part I.); Modern Political Institutions and Theory; Pure Mathematics (Part I., Part II.); Statistical and Actuarial Mathematics; Statistics and Statistical Method.*

Group E—

Chemistry (Part I., Part II.); Physics (Part I., Part II.); Biology (Part I.); Geology (Part I.); Agriculture (Part I., Part II.); Wool Industry* (Part I., Part II.); Meat Industry* (Part I., Part II.); Transport* (Part I., Part II.); Banking, Currency, and Exchange.*

* When offered by the University.

2. A full year's work in any subject selected from Groups A, B, D, E, with the exception of Accounting, shall constitute a part thereof. A part of any such subject shall represent one unit of study for the Degree. Accounting (Section I. and Section II.) shall represent one unit of study for the Degree, and each of the subjects included in Group C shall represent one half-unit of study for the Degree.

3. A candidate shall be held to have passed in any subject or part of a subject when he has attended the course of lectures, performed the laboratory or field work, and passed the examination prescribed for that subject or part of a subject.

4. Candidates shall obtain at least twelve units of credit for the Degree, provided that—

(*a*) The five units be taken from Group A;

(*b*) Not less than two units from Group B;

(*c*) Not less than one unit from Group C, which must include Commercial and Industrial Organization;

(*d*) Not less than one unit from Group D.

5. Candidates shall pass in at least three subjects studied in two or more parts for two or three years. No candidate shall proceed to the study of the second part of any subject (except Agriculture) until he has passed in the first part of that subject. The following subjects or groups of subjects constitute subjects studied in two or more parts:—

1. Economics (Part I., Part II., Part II.A);
2. English (Part I., Part II.);
3. French (Part I., Part II.);
4. Philosophy (Part I., Part II., or Part II.A);
5. Accounting (Section I., Section II.); Commercial and Industrial Organization; Auditing; Taxation Law and Practice;
6. Constitutional History and Political Science (Part I.); Modern Political Institutions and Theory;
7. Modern History; Modern Political Institutions and Theory;
8. Pure Mathematics (Part I., Part II.);
9. Pure Mathematics (Part I.); Statistical and Actuarial Mathematics;
10. Chemistry (Part I., Part II.);
11. Physics (Part I., Part II.);
12. Agriculture (Part I., Part II.);
13. *Wool Industry (Part I., Part II.);
14. *Meat Industry (Part I., Part II.).

* When offered by the University.

The subjects may be selected by the candidate; but the selection must be approved by the Dean of the Faculty.

6. Candidates who select group 5 as equivalent to a subject studied in two parts must pass in Accounting and Commercial and Industrial Organization before taking Auditing and Taxation Law and Practice.

7. Pure Mathematics, Part I., is a compulsory subject of the Degree course. The Faculty, however, may, at its discretion, grant exemption from this subject to candidates who, before proceeding to the last five units of their course, have passed in Mathematics A of the Senior Public Examination at or above Intermediate standard.

8. Candidates who do not include a modern language other than English in their Degree course must satisfy the Faculty as to their ability to translate accurately from a modern foreign language into English before proceeding to the last three units of their course.

9. Economics may not be taken until a pass has been secured in Modern History.

Statistical and Actuarial Mathematics may not be taken until a pass has been secured in Pure Mathematics, Part I.

Public International Law and Economics II.A may not be taken until passes have been obtained in Modern History, Economics (Part I.), Accounting (Section I. and Section II.), and two subjects selected from Group C.

Bankruptcy Law, the Law of Trustees, Company Law, and Auditing may not be taken until a pass has been secured in Accountancy, Part I.

Agriculture may not be taken until a pass has been secured in Biology, Part I.

10. In only one year of his course may a candidate receive credit towards the Degree in as many as four subjects selected from Groups A (excepting Accounting), B, D, and E. In other years he may not receive credit in more than three subjects selected from such groups.

11. Until such time as the Senate shall otherwise determine, the examinations for admission as Associates in the following Institutes of Accountants and Secretaries shall be recognised for the purpose of the Bachelor of Commerce Degree in Accounting (Section I., Section II.) and in the subjects of Group C:—

The Federal Institute of Accountants;

The Commonwealth Institute of Accountants;

The Australian Corporation of Practising Accountants;

The Chartered Institute of Secretaries;

The Australian Institute of Secretaries;

The Institute of Chartered Accountants of Australia.

12. If a candidate has failed in any year to pass the examination in any subject of his course, the Faculty, in its discretion, may grant exemption in whole or in part from further attendance at lectures and from further laboratory practice in that subject or any part of that subject.

13. Candidates who, subject to these rules, have secured twelve units of credit may be admitted to the Degree of Bachelor of Commerce.

14. Bachelors of Commerce who, before or after graduation, have satisfied the Faculty that they have had sufficient practical experience in the keeping of financial books and in the preparation of final accounts, and have obtained credit for all the subjects of Group C, may have their certificates endorsed accordingly and may indicate such endorsement by adding "(Accountancy)" after the name of their Degree: thus, "B.Com. (Acctcy.)."

Note.—The following courses are suggested for the guidance of students:—

1. Course with a direction towards Accountancy—

   The subjects of Group A; English, Part I.; Philosophy, Part I.; the subjects of Group C; Statistics and Statistical Method; one other subject from Group D studied in two parts.

2. Course with a direction towards Public Administration—

   The subjects from Group A; French, Part I., or German, Part I.; Philosophy, Part I.; Commercial and Industrial Organization; Auditing; Taxation Law and Practice; Constitutional History and Political Science, Part I.; Modern Political Institutions and Theory; Public International Law; Statistics and Statistical Method.*

3. Course with a direction towards Industry or Agriculture—

   The subjects from Group A; Language, Part I.; Philosophy, Part I.; Commercial and Industrial Organization; Auditing; Taxation Law and Practice; Public International Law; and two subjects from Group E, one of which must be studied in two parts.

4. Course with a direction towards Salesmanship—

   The subjects from Group A; Language, Part I.; Philosophy, Part I. and Part II.; Commercial and Industrial Organization; Mercantile Law; Pure Mathematics, Part I.; a subject from Group E studied in two parts.

* When offered by the University.

5. Course with a direction towards Law—

The subjects from Group A; English, Part I.; Philosophy, Part I.; the subjects from Group C; Public International Law; Constitutional History and Political Science, Part I.; Modern Political Institutions and Theory.

6. Course with a direction towards Actuarial Science—

The subjects from Group A; Language, Part I.; Philosophy, Part I.; the subjects from Group C; Pure Mathematics, Part I.; Statistical and Actuarial Mathematics; Statistics and Statistical Method.*

BACHELOR OF SCIENCE IN AGRICULTURE—PASS DEGREE.

Scheme of Study.

1. Candidates for the Degree of Bachelor of Science in Agriculture shall have fulfilled the matriculation requirements for the Faculty of Agriculture.

2. A candidate shall be held to have passed in any subject or part of a subject when he has attended the course of lectures, performed laboratory and field work, and passed the examination prescribed for that subject or part of a subject.

First Year.

3. During the first year of their course, candidates shall pass in the following subjects:—

Biology, Part I.;
Chemistry, Part I.;
Geology and Mineralogy, Part I.;
Physics, Part I.; and
Technical Drawing, as prescribed for students in Agriculture; or Pure Mathematics I., as prescribed for First Year Science Students selecting Group (*a*). (*See* Calendar, Part I., p. 56.)

During the Vacation between the First and Second Years of their course, candidates shall engage in field or such other work as may be prescribed.

* When offered by the University.

Candidates who have fulfilled the foregoing conditions shall thereby complete their First Year.

Second Year.

4. Candidates who have completed their First Year may proceed to the Second Year of their course. Such candidates shall pass in the following subjects:—

Economic Entomology;
Agricultural Chemistry, Part I.;
Agricultural Geology;
Botany, Part II.; and
Plant Pathology.

During the Vacation between the Second and Third Years of their course, candidates shall engage in field or such other work as may be prescribed.

Candidates who have fulfilled the foregoing conditions shall thereby complete their Second Year.

Third Year.

5. Candidates who have completed their Second Year may proceed to the Third Year of their course. Such candidates shall pass in the following subjects:—

Principles of Agriculture, Part I.;
Genetics and Plant Breeding;
Agricultural Botany;
Zootechny;
Ailments of Live Stock;
Principles of Agriculture, Part II.;
Agricultural Bacteriology;
Farm Bookkeeping;
Principles of Fruit Culture;
Agricultural Engineering; and
Dairying.

During the Vacation between the Third and Fourth Years of their course, candidates shall engage in field or such other work as may be prescribed.

Candidates who have fulfilled the foregoing conditions shall thereby complete their Third Year.

Fourth Year.

6. Candidates who have completed their Third Year may proceed to the Fourth Year of their course. Such candidates shall pass in the following subjects:—

Agricultural Economics, Part I.;
Agricultural Chemistry, Part II.;
Botany, Part III.;
Meteorology;
Principles of Agriculture, Part III.;
Veterinary Parasitology; and
A special subject selected by the candidates and approved by the Faculty—*e.g.*, Entomology, Plant Pathology, Agricultural Chemistry, Agricultural Bacteriology, Agriculture.

In the paragraph headed "Note" on page 75 of Calendar, Part I., the last sentence *to read:* "As a general rule, the matter as edited should not occupy more than forty foolscap pages of double-spaced typewriting."

Theses should be submitted so as to reach the Registrar not later than the second Monday in February of each year.

DIPLOMA IN MECHANICAL AND ELECTRICAL ENGINEERING.

RULES.

Entrance Requirements.

1. Candidates for the Diploma in Mechanical and Electrical Engineering shall pass an Entrance Examination in the following subjects, namely: English, Geography, Arithmetic, Algebra, and Geometry. These subjects may be passed either at—

(*a*) The Annual Technical College Examination of the Department of Public Instruction at the Stage II. Standard* in each case; or

(*b*) The Junior Public Examination of the University of Queensland.

---

* A Supplementary Examination in this grade will be held each year in the month of February, and it will be open to candidates who sat in the preceding November to sit again in this examination for any subject or subjects in which they may have failed to pass in November.

2. The whole of the subjects must be passed in one and the same examination period extending from November to the following March, provided that the holder of a Junior Public Examination Certificate may pass at a subsequent examination in any of the subjects mentioned in Clause 1 above not included in his certificate.

COMMERCE CERTIFICATE.

Candidates for the Commerce Certificate are required to pass in the following subjects:—

Modern History;

Economics, Part I.;

Accounting, Section I. and Section II.;

The subjects of Group C of the Bachelor of Commerce Degree Course;

One subject from Group B and one subject from Group D of the Bachelor of Commerce Degree Course.

Pure Mathematics, Part I., is a compulsory subject of the course leading to the Commerce Certificate. The Faculty, however, may, at its discretion, grant exemption from this subject to candidates who have passed in Mathematics A of the Senior Public Examination at or above Intermediate standard, provided that passes in at least one unit from Group B and one unit from Group D have been obtained.

DIPLOMA IN COMMERCE.

Candidates for the Diploma in Commerce are required to pass in the following subjects:—

Modern History;

Economics, Part I. and Part II.;

Accounting, Section I. and Section II.;

The subjects of Group C of the Bachelor of Commerce Degree Course;

Three subjects selected from Groups B, D, and E of the Bachelor of Commerce Degree Course, provided that at least one subject be selected from Group B and one from Group D.

If a modern language other than English be not selected from Group B, the candidate must satisfy the Faculty as to his ability to translate accurately from a modern language into English before completing the course.

Pure Mathematics, Part I., is a compulsory subject of the course leading to the Diploma of Commerce. The Faculty, however, may, at its discretion, grant exemption from this subject to candidates who have passed in Mathematics A of the Senior Public Examination at or above Intermediate standard, provided that passes in at least one unit from Group B and one unit from Group D have been obtained.

DEGREE OF MASTER OF COMMERCE.

On page 88 of Calendar, Part I., the following Rules are added:—

1. Bachelors of Commerce (Accountancy) of at least two years' standing may obtain the Degree of Master of Commerce without sitting for an examination in the Final Honours School of Economics, provided that—

(*a*) They reach a standard not lower than that required for second-class honours in an Examination covering—

1. The subject-matter of—

(i.) The subjects of Group C of the course for the Degree of Bachelor of Commerce;

(ii.) Economics I., II., and II.A;

(iii.) One or more economic, commercial, or technical subjects for intensive study, as the Faculty shall direct from time to time; and

2. The preparation and a satisfactory dissertation on a subject approved by the Professor of History and Economics and studied under the direction of a tutor or tutors assigned by him; and

(*b*) They submit a satisfactory thesis as provided in clause 2 of Statute XX.

2. Masters of Commerce who satisfy the Faculty that they have had six years' practical experience of such a

nature as to render them competent to act as public accountants themselves, and who have obtained credit for all the subjects in Group C of the course for the Degree of Bachelor of Commerce, may have their certificates endorsed accordingly, and may indicate such endorsement by adding "(Accountancy)" after the name of their degree: thus, "M.Com. (Acctcy.)."

ROBERT PHILP SCHOLARSHIP.

The following to be placed as a *footnote* on page 89:—

"Owing to reduction in rate of interest on University investments, the value of the Scholarship will be not more than £100 per annum until otherwise advised."

LIBRARY RULES.

In Rule 3, on page 116—

For "Thursdays" *read* "Fridays," and *for* "Fridays" *read* "Thursdays."

FREE PASSAGES TO EUROPE.

To Clause 5, on page 135, *add*—

"The Passenger Conference advises that Rhodes Scholars are not eligible for Free Passages; hence applications will not be entertained from Rhodes Scholars."

REVISED REGULATIONS.

1. Passages will be awarded only to graduates who satisfy the University that they will have sufficient funds to enable them to devote their whole time abroad to study and research, and give an undertaking to do so.

2. Except in leisure hours and in University Vacations, paid employment must not be undertaken unless the employment is in itself necessary to the study or research proposed by the passage-holder.

3. Passage-holders will be expected to spend at least two years abroad.

4. Except in special circumstances, passages shall not be tenable by married persons.

5. Graduates to whom passages are awarded must sign an undertaking that they will, on completion of their courses, return to Australia. Exemption from this regulation may, in special circumstances, be granted by the Conference.

6. In the case of Engineering students, it is recognised that some of the time will necessarily be spent in shops and yards of engineering firms; but the Associated Lines have expressed a wish that where possible such students should supplement their practical work by attending a University.

7. Subject to the above conditions, the University Senate will be guided in its selection of candidates by giving preference to graduates who, although possessing sufficient means to live in Europe, could not afford to pay for their sea-passages both ways.

McDERMOTT MEMORIAL PRIZE.

Conditions, on page 149, *to read*—

"1. Subject to the provisions of Clause 3, the Prize shall be awarded annually to the candidate for the Degree of Bachelor of Arts with Honours in English Language and Literature or in Modern Languages and Literature who shows the highest proficiency in the section of the Final Honours Examination on English Literature common to both Schools.

"2. The Darnell Professor of English Language and Literature shall report to the Senate, through the Dean of the Faculty of Arts, at the end of the Honours Examination period the name of the candidate to whom he recommends the Prize to be given.

"3. If in the opinion of the examiners in English in any year no candidate reaches a standard sufficiently high to warrant the award, the Prize shall not be awarded in that year, and the amount thereof shall be added to and shall become part of the principal sum."

GERTRUDE MARY WOOLCOCK MEMORIAL PRIZE.

Condition 1, on page 151, *to read*—

"The Prize shall be awarded annually to the candidate for the Degree of Bachelor of Arts with

Honours in Classics who, sitting for the Final Honours Examination of that School for the first time, shows the greatest proficiency in the Greek section of the Examination."

WILLIAM WOOLCOCK MEMORIAL PRIZE.

After "£50," on page 152, *add*—

"(Increased in 1932 to £100)."

HENRY MONTEITH PRIZE.

In Conditions 1, 2, and 3, on page 154—

For "candidate" *read* "undergraduate."

GENERAL RULES.

I.—Academic Year.

1. The Academic Year shall consist of three Terms and two Examination Periods, exclusive of the period occupied by Public and other Examinations not mentioned hereunder.

II.—Terms.

2. The First Term shall commence on the tenth Monday of the year and shall end on the Saturday preceding the twenty-first Monday.

3. The Second Term shall commence on the twenty-third Monday of the year and shall end on the Saturday preceding the thirty-second Monday.

4. The Third Term shall commence on the thirty-fifth Monday of the year and shall end on the Tuesday following the forty-fourth Monday.

III.—Examination Periods.

5. The Annual Examination shall commence on the forty-fifth Monday of the year, and shall extend over a period of not more than three weeks. During this period the following Examinations shall be held:—

(*a*) The Annual Examination for Degree Courses; for the Class I. Examination of the Department of Public Instruction; for the Commerce Certificate and the Diploma of Commerce; and for the Diploma of Journalism.

(*b*) The examination for graduation with Honours in the Faculty of Science, with the exception of Mathematics, in which the examination will be held in February.

(*c*) The examination for higher degrees in the Faculty of Science.

6. There shall also be an examination period commencing on the eighth Monday of the year and extending over a period of not more than two weeks. During this period the following examinations shall be held:—

(*a*) The Supplementary Annual Examination.

(*b*) The examination for graduation with Honours in the Faculties of Arts, Engineering, Commercial Studies, and Agriculture, and in Mathematics in the Faculty of Science; and

(*c*) The examination for higher degrees in these Faculties.

IV.—Supplementary Examination.

7. Except in the Faculties of Arts and Commercial Studies, candidates who at the Annual Examinations have failed to secure a pass for their year, or, if evening students, credit in two subjects, may proceed to a Supplementary Examination in the February following, if granted permission by the Faculty.

Students of Faculties in which Supplementary Examinations have been abolished are hereby notified that no application for a deferred examination will be entertained unless made not later than the date of the examination in the subject or part of a subject in respect of which the application is made. Each application must be supported by evidence bearing upon the grounds on which the application is made, and the evidence must be despatched or delivered to this Office not later than three days after the application.

V.—Enrolments.

8. All enrolments for Courses shall be made on forms provided for the purpose, and shall be lodged with the Registrar not later than the 31st January.

9. An entry for a Supplementary Examination in February shall be treated as a provisional enrolment for the year, and the candidate shall be permitted to submit his enrolment in final form without delay after his results of the Supplementary Examination have been communicated to him.

10. A student's selection of subjects must be approved by the Dean of the Faculty before the enrolment becomes effective.

11. Each day student shall interview the Dean of his Faculty in regard to his work for the year not later than the Saturday immediately preceding the first day of the First Term.

12. Late enrolments may be accepted, at the discretion of the Dean of the Faculty concerned, up to but not after the Saturday in the second week of the First Term. An additional fee of 10s. must be paid in each case where a late enrolment is accepted.

13. With the approval of the Dean of his Faculty, a student may add to the number of subjects selected by him for the year, or substitute one subject for another, at any time up to but not after the Saturday in the second week

of the First Term. He may cancel his enrolment in any subject at any time during the year.

VI.—Enrolment Exemptions.

14. A candidate who enrolled for a subject but failed to pass the concluding examination therein may, if the Faculty approves, be exempted from enrolment in the subject the following year. He may proceed to examination again in the subject at the next Annual Examination upon submitting an entry and paying a fee corresponding to the prescribed Supplementary Examination fee.

VII.—Fees for Enrolments.

15. All fees for enrolments shall be paid in advance, either annually in one sum or in three terminal instalments. Annual and First-Term payments must be made not later than the Saturday preceding the beginning of the first term. When not paid in advance at the beginning of the year, fees for Second Term must be paid on or before the Saturday preceding the beginning of that term, and fees for the Third Term must be paid, together with the fee for the Annual Examination, on or before the 31st August.

16. Any student who does not pay the prescribed fees in accordance with the provisions of Rule 15 shall be required to pay, in addition, a late fee of 10s. If payment is not made within two weeks after the due date, the late fee shall be increased to £1.

17. A student shall not be entitled to have his name entered on the roll of any class in any subject until he has paid the prescribed fees therefor.

VIII.—Time-Tables.

18. The time-tables of lectures for the various Faculties shall be published in the Calendar. Any alteration that it may be necessary to make in the time-table as published will be notified on the University Notice Board from time to time.

IX.—Examination Entries and Time-Tables.

19. Each candidate for the Honours and Annual Examinations in November, or for the Honours Examination in February, or for examination for admission to Higher Degrees, shall lodge his entry, in the prescribed form, with the Registrar on or before the 31st August preceding such examination. He shall at the same time

submit the duplicate deposit slip covering his examination fee and his fees for the Third Term.

20. Each candidate who fails at the Annual Examination in November, and who is entitled to sit for a Supplementary Examination in February, shall lodge with the Registrar, not later than the 10th December preceding, his entry for the Supplementary Examination together with duplicate deposit slip for the prescribed Supplementary Examination fee.

21. No examination entry shall be accepted until the prescribed fees have been paid.

22. A late entry may be accepted from a candidate at any time within seven days after the prescribed date, upon payment by the candidate of a late fee of 10s. in addition to the usual fee.

23. The time-table for the Annual and Honours Examinations in November shall be prepared and posted on the Notice Board of the University not later than the 30th September.

24. The time-table for the Supplementary and Honours Examinations in February shall be prepared and posted on the Notice Board of the University not later than the 31st January.

X.—Examination Results.

25. Lists of candidates in the several subjects shall be prepared by the Registrar and furnished to the Examiners concerned. The results of the candidates shall be entered by the Examiners in these lists.

26. The examination lists as presented by the Examiners shall be placed before the Board of Examiners of the Faculty concerned. The Board shall prepare a schedule containing the complete results; and this schedule, after verification by the Dean, shall be submitted for the confirmation of the Faculty. The results shall thereafter be furnished to the individual students; shall be laid before the Senate at its next meeting; and shall be duly entered in the University records.

XI.—Class Lists.

27. A pass in each subject may be credited as "pass" and "pass with merit."

XII.—Theses for Master's Degree.

28. Each candidate desiring to present a thesis for the Master's Degree shall consult the Dean of his Faculty as to the choice of subjects for the thesis, at least six months before the date on which the thesis must be submitted. He must lodge two copies of his thesis with the Registrar not later than the eighth Monday of the year in which he desires to proceed to the Master's Degree.

XIII.—Applications for Admission to Degrees.

29. Each student desiring to be admitted to a Bachelor's Degree shall make application in the prescribed form and pay the prescribed fee at least fourteen days before the date fixed for the conferring of degrees.

30. A graduate desiring to proceed to a higher degree, who is qualified to do so, shall make application in the prescribed form and pay the prescribed fee not later than the 28th February.

XIV.—Non-matriculated Students.

31. Any person who is not less than 16 years of age, and who in the opinion of the Dean of the Faculty concerned is competent to undertake the work, may be permitted to enrol for the course in any subject, upon complying with the usual enrolment conditions and paying the prescribed fees. Upon approval by the Faculty concerned, special enrolments for parts of courses may be granted at fees approved by the Senate.

XV.—Attendance at Lectures.

32. (*a*) Students compelled to be absent from more than one lecture shall as soon as practicable notify the Professor or Lecturer concerned.

(*b*) The transfer to external status shall not generally be approved if, before applying, the student has been absent from more than three lectures.

XVI.—General.

33. Nothing in these Rules contained shall be construed to prevent any Faculty from holding any examination on any subject or subjects at such time as such Faculty may think fit.

XXIII.—STATUTE RELATING TO FEES.

1. The fees to be paid to the Registrar by all persons who, on and after the 1st January, 1927, enter the University of Queensland or attend the classes and lectures thereat for examinations for the granting of Degrees, Diplomas, and Certificates, and for general purposes, shall be as set out in the Schedule hereto.

2. It shall be lawful for the Senate to make provision by regulation for the time and manner in which the fees shall be paid.

3. Nothing in this Statute contained shall be deemed to prevent the Senate in proper cases from deferring the payment of fees for such period as may be thought fit.

THE SCHEDULE.

The following fees shall be payable:—	£	s.	d.
(*a*) Matriculation	1	1	0
(*b*) Admission *ad eundem statum*	1	1	0
(*c*) Lecture fees for a single subject in any Faculty by both matriculated and non-matriculated students, whether for degree purposes or otherwise, per term	2	2	0
(*d*) (1) Laboratory fees for any single subject in the Faculty of Science—			
(i.) For a first-year course, per term	2	2	0
(ii.) For a second-year course, per term	4	4	0
(iii.) For a third-year course, per term	6	6	0
(2) Laboratory fees for single subjects in the Faculty of Engineering, except those included in (*h*) hereof, in any year, per term	2	2	0

(*e*) Composition fees for complete courses leading to a degree in the Faculty of Arts—

	Lecture Fees. £	s.	d.	Laboratory Fees. £	s.	d.
(i.) For any year of one subject not involving laboratory work	6	6	0	—		
(ii.) For any year of one subject involving laboratory work	6	6	0	6	6	0
(iii.) For any year of two subjects not involving laboratory work	8	8	0	—		
(iv.) For any year of two subjects, one subject involving laboratory work	8	8	0	4	4	0
(v.) For any year of two subjects both involving laboratory work	8	8	0	6	6	0

	£	s.	d.
(vi.) For any year of three subjects none of which involve laboratory work	12	12	0
..	—		

(If one or two of the subjects of students taking three subjects involve laboratory work, the laboratory fees will be at the same rates as those shown in (iv.) and (v.) respectively.)

(*f*) Composition fees for complete courses of study leading to a degree in the Faculty of Science—for all lectures and laboratory work in any year .. 21 0 0

(*g*) Composition fees for complete courses of study in the Faculty of Engineering—for all lectures and laboratory work in any year 22 1 0

(*h*) Fees for single subjects of the Faculty of Engineering—

Subject	Year.	Fee per Term.
Technical Drawing and Engineering Design I.	1	£2 2s.
Heat Engines I.	1	£1 1s.
Applied Mechanics	2	£4 4s., including laboratory work.
Heat Engines II.	2	£4 4s., ,, ,, ,,
Civil Engineering I... ..	3	£2 2s.
Testing Materials	3	£2 2s.
Surveying I.	3	£4 4s., including field work.
Hydraulics	3	£4 4s., including laboratory work.
Engineering Design II. ..	2	£3 3s.
Engineering Design III. ..	3	£3 3s.
Surveying II.	4	£4 4s., including field work.
Civil Engineering II. ..	4	£6 6s., including Electrical Engineering and laboratory work.
Engineering Design	4	£3 3s.
Engineering Chemistry ..	3	£4 4s., including laboratory work.
Applied Electricity	3	£4 4s. ,, ,, ,,
Heat Engines III.	3	£4 4s. ,, ,, ,,
Mechanical and Electrical Engineering	4	£6 6s., complete course only.

(*i*) General purposes fee (including Club House and Sports), payable by all day students, but optional for evening and external students—

	£	s.	d.
By men during the first year	3	3	0
By men during each subsequent year	2	2	0
By women during the first year	2	12	6
By women during each subsequent year ..	2	2	0

The general purposes fee covers, in the case of women students, the membership fees for all the women's Sports Clubs. In the case

of men students, it covers the membership fees for the Athletic, Rifle, and Swimming Clubs only; men students desiring to enrol in the other Clubs must pay an additional fee of £1 1s. per annum.

	£	s.	d.
(*j*) Examinations—			
(i.) Annual Examination—			
For subjects in which assistance by way of lectures or in other ways was received during the year, covering any number	1	1	0
For subjects in which assistance by way of lectures or in other ways was not received during the year—for each subject	2	2	0
(ii.) Supplementary Examination—			
For maximum of two subjects	2	2	0
For each subject over two in addition	1	1	0
(iii.) Supplementary Matriculation Examination—			
For maximum of two subjects	2	0	0
For each subject over two in addition	0	10	0
(*k*) Graduation, payable on application for admission or, in the case of Masters and Doctors, with thesis, entry for examination or claim for exemption—			
Bachelor	3	3	0
Master	5	5	0
Doctor	10	10	0

These fees include admission to the Degrees. If a candidate sits again in another year, the graduation fee already paid stands to his credit, but an examination fee of £1 1s. is payable.

Students may provide their own microscopes, if of an approved pattern, but a certain number are provided by the University, which are available for students upon payment of £1 1s. per year.

In the case of non-matriculated students taking an approved course of study in any Faculty, if the fees chargeable for the subjects of the course exceed the composition fee, the ordinary composition fee will be charged.

For original research undertaken on the recommendation and under the direction of the Professor or Lecturer in charge, the Laboratories of the University may be opened gratis to graduates of the University, except as regards such payment for material and special attendances as may be considered necessary by the Professor or Lecturer. Application to be made to the Registrar and approved by the Chancellor.

FINAL HONOURS EXAMINATION, 1933.

CLASS LISTS.

FACULTY OF ARTS.

(*a*) Classics—

Class II.—Halpin, Barbara Irene.

(*b*) History—

Class I.—Morrison, Allan Arthur.

Class II.—Jay, Robert.

(*c*) Mathematics—

Class II.—Hart, William Hamilton.
Russell, Samuel Leonard.

(*d*) Modern Languages—

Class II.—James, Beryl Catherine.
McCullough, Moira.
Sully, Kathleen Prescot.

FACULTY OF SCIENCE.

Zoology—

Class II.—Blumberg, Boaz.

Applied Chemistry—

Class II.—Jenkins, George Horner.

FACULTY OF ENGINEERING.

CIVIL ENGINEERING.

Class I.—Murray, Alfred Henry.
Bettridge, Walter Stafford.

MECHANICAL AND ELECTRICAL ENGINEERING.

Class I.—Dean, Harry Stephen.
Priestley, Henry Thomas.

Class II.—White, Norman Robert.

DEGREES CONFERRED IN 1933.

BACHELOR OF ARTS.

Anderson, Ivy Joyce
Archibald, Jean Frances
Austin, Catherine Mary
Bell, Oliver John
Butler, Bertram Royston
Clark-Ryan, Ruth
Costin, Reginald Henry
Crawford, Richard Maxwell
Dunstan, Donald Robertson
Ernst, Cyril Beresford
Foote, Stewart Clarence
Garland, James Gordon
Grass, Grace Gray
Halpin, Barbara Irene
Harrold, Hazel Regina
Hart, William Hamilton
Harwood, Samuel James
Heenan, Leonard Thomas
Horton, Evelyn Whitney
Hunt, Ernest Aldington
Jackson, Millicent Edith
James, Beryl Catherine
Jay, Robert
Julius, Margaret Hampton
Langan, James William
Lowe, Edith Alexena
Mathers, Samuel Gordon Bennett
McAlpine, Wallace Robert Armour
McCaffrey, John Francis
McCawley, Thomas Desmond
McCready, Russell Lang
McCullagh, Robert Archibald
McCullough, Moira
Morrison, Allan Arthur
O'Brien, Margaret Amy
O'Connell, Hanora
Payne, Eric Allen
Poulsen, Wilton Lennon
Rennie, Louise Elizabeth
Russell, Samuel Leonard
Smith, Albert Murray
Stephens, Annie Ferguson
Sully, Kathleen Prescot
Sumner, Merle Eunice
Vise, Sybil Addison
Webber, Vernon Asquith
Whight, Thomas Burnside
Wilson, Patricia Lockie
Wood, William

MASTER OF ARTS.

Hickey, Michael Francis
Thomson, Andrew Kilpatrick

BACHELOR OF SCIENCE.

Bond, Harold George
Boyce, Breta
Buzacott, James Hardie
Clappison, Reginald John Snarr
Ferricks, Ellen Mary
Fraser, Raymond Alec
Gillam, Noel William
Griffin, Grace May
Groom, Helen Mary
Knight, Clyde Alexis
Nimmo, Thyra Margaret
Oertel, Alfred Charles
Vallance, Lewis George
White, Edward Lumley Delpratt

MASTER OF SCIENCE.

Blumberg, Boaz
Cue, Dora Joan
Fisher, Norman Henry
Gubby, Maud Emmelyn
Hossack, Annie Winifred Worrella
Summerville, William Alan Thompson

DOCTOR OF SCIENCE.

Wiley, Waldo Jackson.

BACHELOR OF APPLIED SCIENCE IN INDUSTRIAL CHEMISTRY.

Fraser, Keith Macdonald
Jenkins, George Horner

MASTER OF APPLIED SCIENCE IN INDUSTRIAL CHEMISTRY.

Smith, Norman.

BACHELOR OF ENGINEERING.

Bettridge, Walter Stafford
Channer, Eric Jack
Dean, Harry Stephen
Draper, William George
Hiley, Wraith Harrison
Leadbeater, Charles James
Morrison, George Alexander
Murray, Alfred Henry
Priestley, Henry Thomas
White, Norman Robert

MASTER OF ENGINEERING.

Mulholland, Jack
Oxnam, Jack Sampson

BACHELOR OF SCIENCE IN AGRICULTURE.

Ladewig, Jasper Edward
Marriott, Stanley
Mitchell, Robert Strachan
Shaw, James Graham

AD EUNDEM GRADUM.

MASTER OF ARTS.

Griffith, Maurice Edmund de Burgh.

FOUNDATION SCHOLARSHIPS (Government).

1932.

John Errol Chandos Aberdeen
George William John Agnew
Ronald John Atkinson
Patrick Francis Callaghan
Ralph George Bryant Cameron
Phyllis Lillian Courtice
Charles Thomas Hansen
Alma Elizabeth Hartshorn
Norman James Loveday
Glencairn Mackintosh
Clive Tunley McCorkell
Leo Hanney McMahon
Jan William McMullen
John Joseph Mahoney
Edward Tom Stanley Pearce
Arthur Harold Praeger
Frances Ida Seeley
John Arthur Thompson
Colin White
Maude Joan Woolcock

1933.

Joan Astill
Robert Cecil Black
Edward Thomas Cain
Frederick George Christensen
Elsie Coates
Joseph Evan Collings
Thomas Heywood Connah
Edwin Warner Brandon Da Costa
Thomas John Noel Foley
Robert William Gannon
Gwendda Hanger
George Allen Johnson
Clifford Robert Lulham
Mervyn Powell
John Wesley Radford
Victor Edward Sampson
James Cecil Stevenson
Harold King Thompsett
Patrick Lawrence Tully
Mildred Mary Wilson

*GOLD MEDALS (Government).

1933.

Harry Stephen Dean†
Maud Emmelyn Gubby†

*TRAVELLING SCHOLARSHIP (Government).

*SCHOLARSHIP FOR ENGINEERING (Government).

*SCHOLARSHIP FOR THE ENCOURAGEMENT OF ORIGINAL RESEARCH (Government).

THE THOMAS MORROW PRIZE.

1933—Margaret de Visme Gipps.

The Subject of the Essay for 1934—

(*a*) The Development of the Sugar Industry in Queensland; or

(*b*) Queensland Administration in New Guinea; or

(*c*) The Mapping of the Queensland Coast.

THE LIZZIE HEAL-WARRY PRIZE.

1933—Lorraine Juliet Streeter.

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* Grant suspended until further notice.

† Bronze replica.

THE ARCHIBALD SCHOLARSHIP.

1933—No award.

The Subject of the Essay for 1934—"The Development and Control of Australian Exports (other than Wool and Wheat)." (Entries close on Monday, 19th February, 1934.)

THE RHODES SCHOLARSHIP.

1934—Jack Christian Richards.

THE ROBERT PHILP SCHOLARSHIP.

1933—Rodger Henry Watson.

THE WALTER AND ELIZA HALL ENGINEERING FELLOWSHIP.

1931.—James Alfred Andrew Pollock, B.E.

THE WALTER AND ELIZA HALL FELLOWSHIP IN ECONOMIC BIOLOGY.

1932-1933.—G. Hurlstone Hardy.

THE JOHN THOMSON LECTURESHIP.

1933—No appointment.

THE SIR THOMAS McILWRAITH ENGINEERING SCHOLARSHIPS.

1933.

Roy Thomas Hinckley Jack Christian Richards
John Richard Alford Walker

THE FORD MEMORIAL MEDAL.

1933—No award.

The Subject of the Poem for 1934—"The University Site at St. Lucia."

THE ALEXANDER AND ELIZABETH RAFF MEMORIAL SCHOLARSHIP.

1934—Leo Hanney McMahon.

P. J. McDERMOTT MEMORIAL PRIZE.

1933.—No award.

JOHN MURTAGH MACROSSAN MEMORIAL LECTURESHIP.

1933.—A. H. Martin, M.A., Ph.D.

GERTRUDE MARY WOOLCOCK MEMORIAL PRIZE.

1933.—No award.

WILLIAM WOOLCOCK MEMORIAL PRIZE.

1933—No award.

SLADE SCHOLARSHIP.

1934.

Frederick William Blackford } *aeq.*
Thomas Hugh Strong }

HENRY MONTEITH PRIZE.

1933—Alma Elizabeth Hartshorn.

THE McNAUGHTON SCHOLARSHIPS.

(Founded in 1931 by a bequest of £2,920 under the Will of Duncan McNaughton, of Roma.)

Conditions.

(a) The Kate McNaughton of Roma Scholarship.

1. The Scholarship shall be tenable in any one of the following subjects or groups of subjects:—Classics, English Language and Literature, History, Economics, Mathematics, Modern Languages, and Philosophy.

2. The Scholarship shall be awarded annually to the best candidate who, having secured at least six units of credit towards his Bachelor's Degree, proposes to pursue an Honours Course within the University in any of the abovementioned subjects or groups of subjects.

3. The Scholarship shall be awarded on the recommendation of the Faculty of Arts before the end of each academical year. Each candidate's record throughout his course and his general fitness for profiting by further study shall be taken into account in making the award.

4. Candidates must submit their applications so as to reach the Registrar on or before the 31st October. They must state in their applications what Honours Course they intend to pursue.

5. If in any year no candidate reaches a standard sufficiently high to warrant the award, the Scholarship shall not be awarded in that year, and the amount thereof shall be added to and shall become part of the principal sum.

1933.

Phyllis Lillian Courtice } *aeq.*
Maude Joan Woolcock }

(b) The Duncan McNaughton Scholarship.

1. The Scholarship shall be tenable in any one of the following subjects:—Botany, Chemistry, Geology, Mathematics, Physics, Zoology.

2. The Scholarship shall be awarded annually to the best candidate who, having completed the requirements for the Pass Degree of Bachelor of Science, proposes to pursue his studies for another year to complete an Honours Course in Science.

3. The Scholarship shall be awarded on the recommendation of the Faculty of Science before the end of each academical year. Each candidate's record throughout his course and his general fitness for profiting by further study shall be taken into account in making the award.

4. Candidates must submit their applications so as to reach the Registrar on or before the 31st October. They must state in their applications what Honours Course they intend to pursue.

5. The Scholar shall be required to devote not more than three hours per week during term (apart from his post-graduate studies) to such services within the Department concerned as may be approved by the Faculty of Science on the recommendation of the Head of the Department in which the post-graduate work is being done. In consideration of these services, he shall be exempted from the payment of lecture fees.

6. If in any year no candidate reaches a standard sufficiently high to warrant the award, the Scholarship shall not be awarded in that year, and the amount thereof shall be added to and shall become part of the principal sum.

1932—Noel William Gillam.
1933—Clement Leslie Knight.

THE PRIEST MEMORIAL PRIZE.

(Founded in 1932 by a gift of £200 from the Mother of Herbert James Priest, B.A., B.Sc., Lecturer in Mathematics in the University of Queensland, who died on the 3rd December, 1930.)

1. The interest on the above sum shall be utilised in providing a Prize to be awarded annually on the results of the examination in Applied Mathematics, Part II., to the undergraduate who, sitting for the examination in that subject for the first time, is most proficient in the Dynamics section of the subject. The Prize shall be awarded in books to be selected by the winner and approved by the President of the Board of Faculties.

2. The President of the Board of Faculties, after consultation with the Professor of Mathematics, shall report to the Senate at the end of the Annual Examination period the name of the undergraduate to whom he recommends the Prize to be given.

3. If in any year the President of the Board of Faculties, after consultation with the Professor of Mathematics, reports that no undergraduate has reached a standard sufficiently high to warrant the award, the Prize shall not be awarded in that year, and the amount thereof shall be added to and become part of the principal sum.

1933.

Ronald John Atkinson } *aeq.*
Edward Burnett Aloysius Pender }

DETAILS OF SUBJECTS.

Faculty of Arts—B.A. Degree.

A.—CLASSICS.

Professor Michie and Mr. Castlehow.

I. LATIN. II. GREEK.

LATIN, PART I.; AND GREEK, PART I.

The subjects of Examination will be:—

1. Such Authors or portions of Authors as are prescribed for special study (see below).
2. Prose Composition.
3. Translation from Authors not specially prescribed.
4. Outlines of Roman History and Greek History.
5. Outlines of Latin Literature and Greek Literature.

Special Authors are prescribed, as follows:—

FOR THE EXAMINATION OF 1934.

LATIN, PART I.

Vergil, Æneid VI.: Page (Macmillan).
Horace, Epistles I.: Wilkins (Macmillan).
Livy, Book XXI.: Trayes (Bell and Sons).

GREEK, PART I.

Plato, Apology: Adam (Cambridge University Press).
Demosthenes, Philippic I. and Olynthiacs: Sandys (Macmillan).
Homer, Iliad I.: Bond and Walpole (Macmillan).

LATIN, PART II.; AND GREEK, PART II.

The subjects of Examination will be:—

1. Authors, or portions of Authors, prescribed for special study.
2. Prose Composition.
3. Translation from Authors not specially prescribed.
4. History, as prescribed.
5. Literature, as prescribed.

FOR THE EXAMINATION OF 1935.

LATIN, PART I.

Vergil, Æneid II.: Page (Macmillan).
Livy, Book XXV.: Monro (Clarendon Press).
Tacitus, Agricola: Furneaux and Anderson (Clarendon Press).

GREEK, PART I.

Demosthenes, Philippic I. and Olynthiacs: Sandys (Macmillan).
Homer, Odyssey IX. and X.: Edwards (Cambridge University Press).
Aristophanes, Birds: Merry (Clarendon Press).

FOR THE EXAMINATION OF 1934.

(*a*) Special authors—

LATIN, PART II.

Livy, Book XXII.: Capes and Melhuish (Macmillan).
Tacitus, Histories I.: Godley (Macmillan).
Horace, Epistles II. and Ars Poetica: Wilkins (Macmillan).

GREEK, PART II.

Herodotus VII.: Butler (Macmillan).
Oxford Book of Greek Verse, Selections (Clarendon Press).
Euripides, Alcestis: Earle (Macmillan).

(*b*) History—

Roman History, Special Period, Augustus to Trajan; Greek History, General.

(*c*) Literature—

General knowledge.

FOR THE EXAMINATION OF 1935.

(*a*) Special authors—

LATIN, PART II.

Cicero, Select Letters: How and Clark (Clarendon Press).
The Hundred Best Latin Poems: Mackail (Gowans and Gray).
Juvenal, Satires: Duff (Cambridge University Press).

GREEK, PART II.

Thucydides, Book IV.: Graves (Macmillan).
Aristophanes, Frogs: Merry (Clarendon Press).
Demosthenes, De Corona: Goodwin (Cambridge University Press).

(*b*) History—

Roman History, General; Greek History, Special Period 510-404 B.C.

(*c*) Literature—

General knowledge.

HONOURS SCHOOL OF CLASSICS.

COURSE EXTENDING OVER THREE OR FOUR YEARS.

The Examination for Classical Honours will be held in March in each year.

Before presenting themselves for Examination, candidates must have done the work of *five* full Courses at least in their Honours Group, and generally conformed with the rules for graduation in Arts.

The Subjects of Examination will be:—

1. Prose Composition, Greek and Latin.
2. Translation from Authors not specially prescribed.

3. Authors specially prescribed. (*See note A.*)
4. Literature—
   (*a*) General;
   (*b*) Special studies, as prescribed. (*See note B.*)
5. History—
   (*a*) General;
   (*b*) Special periods, as prescribed. (*See note C.*)
6. Greek Philosophy. (*See note D.*)

Prescribed Work.

HONOURS EXAMINATIONS, 1934-1936.

(*a*) Authors—

For March, 1934.

Juvenal, Selections.
Tacitus, Histories II.
Cicero, Select Letters.
Lucretius, Book III.
The Hundred Best Latin Poems.
Seneca, Dialogues X., XI., XII.
Æschylus, Agamemnon.
Sophocles, Œdipus Tyrannus.
Thucydides IV.
Aristophanes, Clouds.
Herodotus VII.
Oxford Book of Greek Verse, Selections.

For March, 1935.

Lucretius, Book III.
Horace, Epistles II. and Ars Poetica.
Livy XXII.
Cicero, Select Letters.
The Hundred Best Latin Poems.
Tacitus, Histories I.
Herodotus VII.
Euripides, Alcestis.
Æschylus, Agamemnon.
Thucydides IV.
Aristophanes, Clouds.
Oxford Book of Greek Verse, Selections.

For March, 1936.

Cicero, Select Letters.
The Hundred Best Latin Poems.
Tacitus, Histories I.
Horace, Epistles II. and Ars Poetica.
Livy XXII.
Juvenal, Satires.
Demosthenes, De Corona.
Thucydides IV.

Aristophanes, Frogs.
Herodotus VII.
Euripides, Alcestis.
Oxford Book of Greek Verse, Selections.

(*b*) History—

(i.) Greek, General, and Special Period, 510-404 B.C.
(ii.) Roman, General, and Special Period, Augustus to Trajan.

(*c*) Literature—

The two special subjects studied in the two years preceding the examination.

(*d*) Ancient Philosophy. (*See note D, infra.*)

NOTES.

A.—Prescribed Books.

The same list of special authors is prescribed for the Honours Courses and for the Pass Course, Part II., but Candidates for Honours will offer for their final Examination the special authors of two consecutive Part II. Pass Courses, and will be expected to show a higher standard of knowledge than is required in the Graduation Course.

B.—(*a*) Greek Drama and Aristotle's Poetics.
(*b*) Greek and Roman Epic.

C.—(*a*) Greek History, 510 to 404, B.C.
(*b*) Roman History: Augustus to Trajan.

D.—Greek Philosophy.

Candidates for Classical Honours are required to show a good general knowledge of the history of Greek philosophical thought from Thales to Plotinus. Plato's *Republic* and Aristotle's *Ethics* are prescribed for special study, and a knowledge of the Greek text of these books is expected. Essays are set periodically.

In addition to the Authors prescribed for special study, students should have copies of the following books:—

For Roman History—

How and Leigh: History of Rome (Longmans). Pelham: Roman History (Rivington). Bury: Students' Roman Empire (Murray).

Also texts of Tacitus (Annals and Histories, edited by C. D Fisher, Oxford Classical Texts) and of Suetonius (Teubner).

For Greek History—

Bury: History of Greece (Macmillan); *or*
Holm: History of Greece, 4 vols. (Macmillan).

Also texts of Thucydides and Herodotus (Oxford Classical Texts).

For Greek and Latin Literature—

Murray: Greek Literature (Heinemann).
Mackail: Latin Literature (John Murray).

For Ancient Philosophy—

Plato: Ed. J. Burnet (Oxford Classical Texts: vols. i-iv.).
Wallace: Outlines of Aristotle's Philosophy (Cambridge).
Aristotle: Ethica Nicomachea, ed. Bywater (Oxford).
Jowett's Translation and Introductions to the Republic can now be got in the Oxford Library of Translations (Clarendon Press, 2 vols., 7s.).

For Grammar, &c.—

Latin Grammar: Gildersleeve and Lodge.
Greek Syntax: Thomson.
Prosodia Latina: Postgate (Clarendon Press).

III. GREEK LITERATURE AND ART.

(Sixty Lectures.)

History.

(Twenty Lectures.)

General Outline of the History of Ancient Civilization, with closer attention to the History of Greece.

Books recommended.

Breasted: History of Ancient Times (Ginn and Co.).
Bury: History of Greece.

For Special Reading.

Herodotus I. and II. (Everyman's Library).
Thucydides I. (Everyman's Library).

Literature.

(Ten Lectures.)

Subject: The Drama.

For Special Reading.

Aristotle, On the Art of Poetry: Bywater (Oxford University Press—translation only).

Students will be expected to show a first-hand knowledge of representative plays of the Greek and Roman dramatists.

Philosophy.

(Fifteen Lectures.)

General outline of the History of Greek Philosophical Thought from Thales to Plotinus.

Books recommended.

W. T. Stace: Critical History of Greek Philosophy.

For Special Reading.

Plato, Republic: Translation, Lindsay (Dent).

HISTORY OF ART.

(Ten Lectures.)

General knowledge of the subject. The Lectures will deal chiefly with Architecture and Sculpture.

HISTORY OF SCIENCE.

(Five Lectures.)

Book recommended.

Mathematics and Science in Classical Antiquity: Heiberg.

B.—MODERN LANGUAGES AND LITERATURE.

Professor Stable, Dr. Robinson, Mr. Schindler, and Mr. Mahoney, Mr. Tommerup (part time).

IV. ENGLISH.

PART I.

1. Outline History of the Language and Literature.
2. The Elizabethan Period.

Text-books.

Bradley: The Making of English.
Handbooks of English Literature. The Age of Shakespeare.

1934.

For General Study.

The Oxford Book of Australasian Verse.
Sidney: Apologie for Poetrie.
Everyman, with other Interludes (Everyman's Library).
Minor Elizabethan Drama—Pre-Shakespearean Tragedies (Everyman's Library).
Shakespeare: Sonnets.
Shakespeare: Richard III.
*Dover Wilson: Life in Shakespeare's England (Cambridge).
†Dickens: David Copperfield.
†Carlyle: Past and Present.

Set Books.

Spenser: The Faery Queene, Book I.
Shakespeare: Romeo and Juliet.
Greene: Friar Bacon and Friar Bungay.
The Poetry of the Age of Shakespeare (Cambridge).

* For Arts students only. † For Commerce students only.

1935.

For General Study.

The Oxford Book of Australasian Verse.
Sidney: Apologie for Poetrie.
Everyman, with other Interludes (Everyman's Library).
Minor Elizabethan Drama—Pre-Shakespearean Comedies (Everyman's Library).
Shakespeare: Sonnets.
Shakespeare: Midsummer Night's Dream.
*Dover Wilson: Life in Shakespeare's England (Cambridge)
†Dickens: David Copperfield.
†Carlyle: Past and Present.

Set Books.

Shakespeare: Richard II.
Spenser: Faery Queene, Book II.
Marlowe: Edward II.
Strong and Wallace: English Verse and Prose (Oxford).

PART II.

1. English Literature from the Elizabethan Period to 1832.
2. Fourteenth-Century Literature.

Text-books.

Handbooks of English Literature—
The Age of Chaucer. The Age of Johnson.

1934.

For General Study.

Chaucer: The Knighte's Tale.
The Tale of Gamelyn.
Shakespeare: Julius Cæsar.
Shakespeare; The Winter's Tale.
Steele: Selections (Oxford).
Coleridge: Biographia Literaria (Everyman).
Milton: Paradise Lost.
The Prelude to Poetry (Everyman).

Set Books.

Chaucer: Prologue to Canterbury Tales.
Shakespeare: Hamlet.
Dryden: Essay of Dramatic Poesy.
Shelley: Poems.
Strong and Wallace: English Verse and Prose (Oxford).

1935.

For General Study.

Chaucer: Minor Poems.
Shakespeare: Hamlet.

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* For Arts students only. † For Commerce students only.

Shakespeare: Cymbeline.
Beaumont and Fletcher: The Philaster.
Goldsmith: The Vicar of Wakefield.
Milton: Paradise Regained.
Milton: Samson Agonistes.
The Prelude to Poetry (Everyman's Library).

Set Books.

Chaucer: Prologue and The Nun's Priest's Tale.
Shakespeare: King Lear.
Coleridge: Poems.
Johnson: Rasselas.
Strong and Wallace: English Verse and Prose (Oxford).

PART III.

(Honours Students only.)

1. The History of Criticism.
2. The Victorian Age.

Text-books.

Handbooks of English Literature: The Age of Tennyson.

Set Authors.

1934.

Carlyle: Heroes and Hero Worship.
English Critical Essays (Nineteenth Century) (Oxford).
Ruskin: Fors Clavigera.
Meredith: The Egoist.
Tennyson: In Memoriam.
Browning: Men and Women.
Rossetti: Poems.
Strong and Wallace: English Verse and Prose (Oxford).

1935.

Carlyle: Past and Present.
Ruskin: The Seven Lamps of Architecture.
Borrow: Lavengro.
Tennyson: Poems.
Browning: Poems.
Matthew Arnold: Poems.
Morris: Jason.
Strong and Wallace: English Verse and Prose (Oxford).

V. FRENCH.

Books prescribed for all Students.

Petit Larousse Illustré (Larousse).

Tutorial French Grammar (Weekley and Wyatt, University Tutorial Press).

Marcel Braunschvig—

(i.) Notre littérature étudiée dans les textes (2 vols., A. Colin, Paris).

(ii.) La littérature française contemporaine étudiée dans les textes (1 vol., A. Colin, Paris).

Alfred Rambaud, Petite Histoire de la Civilisation française des origines jusqu'à nos jours (A. Colin, Paris).

Part I.

1. Composition, Translation, and Phonetics.
2. Outline History of French Language, Literature, and Culture.
3. Classical Masterpieces.

Prescribed books.

1934.

Corneille: Polyeucte (Hachette, Paris).

Racine: Athalie (Hachette, Paris).

Molière: Tartuffe (Hachette, Paris).

La Fontaine: Fables (Hachette, Paris).

1935.

Corneille: Nicomède (Hachette, Paris).

Racine: Mithridate (Hachette, Paris).

Molière: Les Précieuses Ridicules (Hachette, Paris).

La Fontaine: Fables (Hachette, Paris).

Part II.

(i.) Composition and translation.

(ii.) Private correspondence in 17th and 18th centuries.

(iii.) French lyrical poetry.

(iv.) The Renascence

Prescribed books.

1934.

Darmesteter and Hatzfeld: Le Seizième Siècle en France, étude suivie de morceaux choisis (Delagrave, Paris).

Lanson: Choix de Lettres du XVII^{e} Siècle (Hachette, Paris). Choix de Lettres du XVIII^{e} Siècle (Hachette, Paris).

The Oxford Book of French Verse (Oxford University Press).

1935.

As for 1934.

PART III.

(Honours Students only.)

1. Composition and Translation.
2. History of Criticism.
3. The Nineteenth Century.

Prescribed books.

1934.

Roubaud: Histoire contemporaine depuis le milieu du XIXe siècle et Institutions actuelles de la France (Armand Colin, Paris).

Vial et Denise: Idées et doctrines littéraires (3 vols., Delagrave, Paris).

Plattard: La Renaissance des lettres en France de Louis XII. à Henri IV. (Armand Colin, Paris).

1935.

Roubaud: Histoire contemporaine depuis le milieu du XIXe siècle et Institutions actuelles de la France (Armand Colin, Paris).

Gauthier-Ferrières: Anthologie des écrivains du XIXe siècle (4 vol., Larousse).

Gauthier-Ferrières: Anthologie des écrivains contemporains (2 vol., Larousse).

VI. GERMAN.

PART 1.

1. Composition, Translation, and Phonetics.
2. Outline History of German Literature and Language.
3. The XVIIIth Century.

Text-book.

Kluge: Geschichte der deutschen National-Literatur.

Prescribed books.

1934.

Lessing: Minna von Barnhelm.
Schiller: Jungfrau von Orleans.
Goethe: Faust (Erster Teil).
Goethe: Italienische Reise.
The Oxford Book of German Verse.
Heyse: L'Arrabbiata (Heath).*

* To be prepared for Oral Examination.

1935.

Lessing: Emilia Galotti.
Schiller: Die Braut von Messina.
Goethe: Iphigenie auf Tauris.
Goethe: Gedichte.
The Oxford Book of German Verse.
Kleist: Michael Kohlhaas.*

PART II.

1. Composition and Translation.
2. German Poetry from Opitz to Lessing.
3. The Rise of the Romantic School.

Text-book.

Kluge: Geschichte der deutschen National-Literatur.

Prescribed books.

1934.

Opitz: Das Buch von der deutschen Poeterei.
Klopstock: Der Messias (Erster Teil).
Lessing: Der Laokoon.
Tieck: Der gestiefelte Kater.
Kleist: Michael Kohlhaas.
The Oxford Book of German Verse.
Fontane: Effi Briest.*

1935.

Opitz: Das Buch von der deutschen Poeterei.
Gellert: Fabeln und Erzählungen.
Lessing: Hamburgische Dramaturgie.
F. Schlegel: Fragments.
Kleist: Friedrich von Homburg.
The Oxford Book of German Verse.
Hauff: Lichtenstein.*

PART III.

(Honours Students only.)

Temporarily suspended.

*To be prepared for Oral Examination.

HONOURS SCHOOL OF ENGLISH LANGUAGE AND LITERATURE.

The Examination will consist of two sections, and will include the following subjects:—

SECTION I.

1. History of the Language and Phonetics.
2. Anglo-Saxon Literature.
3. Middle-English Literature.
4. The History of Modern Criticism.
5. Textual Criticism and Bibliography.
6. Essay on Literary Criticism or on Language.

SECTION II.

1. General English Literary History to 1832.
2. Chaucer and the Early Renaissance.
3. Shakespeare.
4. The Victorian Age and Contemporary Literature.
5. Special Author or Authors.
6. Essay on some Literary Subject.

For Special Study.

A. J. Wyatt: Anglo-Saxon Reader.
Emerson: Middle-English Reader.
A. J. Wyatt: Old English Grammar.
D. Jones: The Pronunciation of English.

Special Authors—

1934—Browning.
1935—Wordsworth and Coleridge.
1936—Milton.
1937—The Drama since 1850.

HONOURS SCHOOL OF MODERN LANGUAGES AND LITERATURE.

A.—ENGLISH.

Candidates selecting English as one of their subjects will take Section II. of the English Honours course with, in addition, a modified course in the History of the Language and Phonetics (Section I.).

For Special Study.

A. J. Wyatt: Anglo-Saxon Reader.
Sweet: First Middle-English Primer.
A. J. Wyatt: Old English Grammar.
D. Jones: The Pronunciation of English.

B.—FRENCH.

Candidates selecting French will be examined in—

1. Alternative subjects for an Essay (in French) on French Literature or Literary Criticism.

2. Passages from unspecified French authors not earlier than 1500 for translation and explanation.
3. Passages from English authors to be translated into French.
4. A special author or subject of French Literature after 1500.
5. The Nineteenth Century and Contemporary Literature.
6. (*a*) Passages from specified French writings earlier than 1500 for translation and explanation, with questions on Language, Metre, and Literary History.
   (*b*) The elements of Historical French Grammar.

Text-book.

F. Brunot: Précis de Grammaire Historique (Masson).

Set book.

L. Constans: Chrestomathie de l'Ancien Français (Ed. Champion).

Special Authors—

1934—Boileau.
1935—Alfred de Vigny.
1936—Jean-Jacques Rousseau.
1937—La Rochefoucauld and Saint-Evremond.

C.—HISTORY AND ECONOMICS.

Professor Alcock, Dr. Melbourne, Mr. Gifford, and Dr. Fry.

VII. BRITISH HISTORY.

[NOTE.—For Modern History, see VIIA.]

PART I.

(*a*) English History to 1701;
(*b*) English Economic History to 1800; and
(*c*) Colonial History to 1932.

Tutorials.

See information as to First-year Honours work.

Books prescribed.

(Books prescribed for Modern History are marked with an asterisk *.)

English Constitutional History: Taswell-Langmead; *or*
Student's Manual of English Constitutional History: D. J. Medley.
*Short History of British Colonial Policy: H. E. Egerton.
*State and Federal Constitutions of Australia: K. R. Cramp.
Introductory History of England, vols. i. and ii.: C. R. L. Fletcher.
*Social and Industrial History of England, pts. i. and ii.: F. W. Tickner (Arnold).

Philips' Historical Atlas, Mediæval and Modern.

Longmans' Political History of England, vols. v., vi., vii., and viii.; *or*

Methuen's History of England in Seven Volumes, vols. iv. and v.

PART II.

(*a*) English History, chiefly between 1701 and 1859.

(*b*) General European History, 1815-1914.

Books prescribed.

(Books prescribed for Modern History are marked with an asterisk *.)

History of England: G. M. Trevelyan.

Student's Manual of English Constitutional History: D. J. Medley; *or*

English Constitutional History: Taswell-Langmead.

*History of Socialism: Markham.

*The Governance of England: S. Low.

*The Last Century in Europe: C. E. M. Hawkesworth.

Methuen's History of England in Seven Volumes, vols. vi. and *vii.

*Philips' Historical Atlas, Mediæval and Modern.

VIIA. MODERN HISTORY.

NOTE.—*Modern History* consists of British History I., Parts (*b*) and (*c*), and British History II., Part (*b*). **Modern History is not a subject for the Arts degree.** Students should have their own copies of *all* the works marked with an asterisk in the above lists.

VIII. CONSTITUTIONAL HISTORY AND POLITICAL SCIENCE.

Law Students should refer to course XVII. (p. 56).

PART I.

1. (*a*) British Constitutional History.
   (*b*) General Principles of Constitutional Development, as illustrated by (*a*).
   (*c*) Groundwork of Constitutional Law. as illustrated by (*a*).
2. (*a*) General History of Political Thought up to about 1701.
   (*b*) The General Theory of the State.

(*c*) The Relation of (*a*) and (*b*) to Selected Political and Constitutional Developments of Outstanding Importance.

Books prescribed.

(For Special Study.)

Hobbes: Sir Leslie Stephen.

The Leviathan: Thomas Hobbes (Clarendon Press or other edition), chs. xiii. to xxxi.

Books prescribed (General).

The Grammar of Politics: H. J. Laski.

The History of Political Science from Plato to the present: R. H. Murray.

English Constitutional History: Taswell-Langmead.

(*For reference or further reading.*)

Select Charters illustrative of English History: W. Stubbs.

Select Statutes and Constitutional Documents: G. W. Prothero.

Constitutional Documents of the Puritan Revolution: S. R. Gardiner.

Select Cases, Statutes, and Documents: C. G. Robertson.

PART II.

1. (*a*) Constitutional Development in the British Colonies.
   (*b*) Foreign Constitutional History.
   (*c*) Groundwork of Constitutional Law, as illustrated by (*a*) and (*b*).
2. (*a*) General History of Political Thought from about 1701.
   (*b*) Detailed Examination of some Modern Political Philosophies.
   (*c*) Constructive Application of Principles derived from (*a*) and (*b*).

Books prescribed.

(For Special Study.)

Bentham's Fragment on Government: Ed. F. C. Montague.

Utilitarianism: J. S. Mill.

Books prescribed (General).

The Governments of Europe: F. A. Ogg.

Selected Speeches and Documents on British Colonial Policy: A. B. Keith.

The Law of the Constitution: A. V. Dicey.

The History of Political Science from Plato to the present: R. H. Murray.

Note.—Commerce students taking Part II. only should also possess one of the Constitutional Histories prescribed for Part I.

(For reference or further reading.)

The Law and Custom of the Constitution: Sir W. Anson.
Responsible Government in the Dominions: A. B. Keith.
Imperial Unity and the Dominions: A. B. Keith.
Documents of the Canadian Constitution: W. P. M. Kennedy.
Select Constitutional Documents illustrating South African History: G. W. Eybers.
The Commonwealth of Australia: W. Harrison Moore.
The Grammar of Politics: H. J. Laski.
The Elements of Politics: A. Sidgwick.

IX. ECONOMICS.

PART I.

(*a*) General Survey of Economic Theory.
(*b*) Economic History.
(*c*) Economic Geography.

For the Arts Degree course in Economics, (*a*) and (*b*) are compulsory and (*c*) optional; (*a*), (*b*), and (*c*) are all compulsory for the Certificate or Diploma in Commerce, for the Degree of Bachelor of Commerce, and for students in the Honours School of History.

Economic Geography is an evening subject only.

Students should possess the following books:—

Principles of Political Economy: C. Gide.
Theory of Money: D. A. Barker.
Cash and Credit: D. A. Barker.
Australian Banking and Currency: Teare.
Economic Development in Modern Europe: Ogg (Macmillan).
History of Political Economy: Ingram.
Australia Physiographic and Economic: Taylor.
Latest Commonwealth Year Book.
Commercial Geography: Chisholm; *or*
Modern Business Geography: Huntington and Cushing.

The following books may be used for reference and further reading:—

History of Economic Doctrines: Gide and Rist.
Principles of Economics: Taussig.
Principles of Political Economy: J. S. Mill.
Australian Business Principles: Collins, McLaren, Maxwell, and Fenton.

PART II.

(Evening only.)

(*a*) Advanced Economic Theory.
(*b*) Practical Economic Investigations.
(*c*) Tutorially conducted visits to Commercial and Industrial Establishments, on which Essay Work will be based.

Students should possess the following books:—

Principles of Economics: Marshall.
Industry and Trade: Marshall.
Money, Credit, and Commerce: Marshall.
Statistical Methods: F. C. Mills.
Australian Banking, Currency, and Exchange: Teare.
Credit and Currency Control in Australia: Copland.

The following books may be used for reference and further reading:—

Economics of Welfare: Pigou.
Incidence of Taxation: Seligman.
Foreign Exchange: Spalding.
A Treatise on Money (2 vols.): J. M. Keynes.

PART IIA.

(Evening only.)

Books will be prescribed by the Lecturer towards the close of the course in Economics, Part II.

SHORT COURSE.

(For fourth-year students of Engineering or Chemical Engineering or Applied Chemistry.)

Six Lectures, to include—

(*a*) Instruction in Terms and Elementary General Principles of Economics and Business Management;
(*b*) Direction of Reading; and
(*c*) Discussion of a few selected Topics.

HONOURS SCHOOL OF HISTORY.

Candidates must study both divisions of the subjects as set forth above. They must attend lectures on the special study of the year subsequent to taking British History II. Additional reading will be prescribed by the lecturer in tutorial classes. Economic Geography must be studied as part of Economics I.

Candidates are required to attend the lectures in Economics II. during their third year, but need not sit for examination in that subject.

SCHEME SUMMARISING THE REQUIREMENTS FOR AN HONOURS COURSE IN HISTORY AS TAKEN IN THREE YEARS.

First Year—

1. British History I.
2. A part of a language other than English.
3. English I

Constitutional History and Political Science I. may form a fourth subject in the First Year instead of being taken in the Second Year.

Students are also advised to attend weekly tutorials and perform the regular written work associated therewith. *These tutorials are open to pass students* as well as candidates for honours, and will be found valuable for many purposes.

Second Year—

1. British History II.
2. Economics I. (with Economic Geography).
3. Ethics and Metaphysics.
4. Constitutional History and Political Science I.
5. Special Honours course in European History.

Third Year—

1. Constitutional History and Political Science II.
2. Greek Literature, Philosophy, and Art.
3. History, special subject for intensive study.*

* *Note.*—A dissertation is required on a topic associated with or forming a part of the special subject.

Candidates are also required to attend the lectures in Economics II.

Special subject for 1934—

The Privy Council under the Tudors.

Special subject for 1935—

Australian Economic Development, 1788-1855.

HONOURS SCHOOL OF ECONOMICS.

A. Scheme of studies extended over four years.

Except as provided hereunder, candidates for the Degree of Bachelor of Arts with Honours in Economics must attend lectures, inspections, and tutorial classes, pass examinations, and write theses distributed as follows:—

In the First Year—

British History I., or Modern History (especially General Economic History);

In the First and Second Years—

Attend lectures and pass examinations in—

(i.) English I.;

(ii.) French I. or German I. (but see note hereunder at end of Scheme B);

(iii.) Pure Mathematics I.;

(iv.) Logic and Psychology I. (Examination optional);

(v.) Constitutional History and Political Science I.

A pass in Modern History shall count towards credit for the first year, but shall not be accepted as one of the nine passes required for a pass degree in Arts. Candidates who have passed in Modern History may be credited with a pass in British History I. on satisfying the examiners in the portion of that subject omitted from Modern History.

In the Second Year—

(*a*) Attend lectures and pass examinations in Economics I., extended course, including the following sub-courses:—Elementary Economic Theory, Modern Economic History, the History of Economic Theory, Economic Geography, and attendance at and report upon such inspections of establishments or operations as may be prescribed from time to time;

(*b*) Attend lectures and pass an examination in the nineteenth and twentieth century sub-courses in British History II. (including the study of modern world problems) if British History I. was taken instead of Modern History in the first year;

(*c*) Write essays and attend tutorial classes in Economic Theory and History as directed by the Professor of History and Economics.

In the Third Year—

(*a*) Attend lectures and pass examinations in—

(i.) Constitutional History and Political Science II. (Modern Political Institutions and Theories);

(ii.) Economics II., including sub-courses in Currency and Banking, Foreign Trade and Exchange, Advanced Theory, Introduction to Statistics;

(iii.) An approved Law subject; and/or

(iv.) Statistical and Actuarial Mathematics.

Statistical and Actuarial Mathematics may not be taken unless a pass has been secured in Pure Mathematics I. of sufficient merit, in the opinion of the Professor of Mathematics, to indicate ability to obtain full benefit from the course.

(*b*) Attend lectures in Ethics (without Metaphysics);

(*c*) Attend tutorial classes in either Economic Theory or Modern Political Institutions.

In the Fourth Year—

(*a*) Attend lectures in—

(i.) Political Philosophy (an Honours Course in the Department of Mental and Moral Philosophy);

(ii.) Economics III. (Honours only), including sub-courses in Advanced Theory and, when available, Public Administration (as for Commerce students), also intensive study of selected topics such as Public Finance, the Incidence of Taxation, Currency Policy, Foreign Exchange Policy, Industrial Fluctuation;

(*b*) Prepare and present (before the first day of the first examination period of the fifth year) a satisfactory thesis

treating of a subject approved by the Professor of History and Economics and concerning an economic topic studied under supervision during the Fourth Year or a problem of Political Science connected with that topic.

The Final Honours examination shall, at the discretion of the Faculty, be held in the first examination period of the Fifth Year or be divided between that period and the second examination period of the Fourth Year. It shall include papers on all aspects of Economics and on Political Science, Constitutional History, Modern General History, Political and General Philosophy; but candidates who have passed the annual examinations in Logic and Psychology I. and Ethics and Metaphysics may be excused from further examination in General Philosophy.

B. Scheme of studies extended over three years.

Candidates who have passed the Senior Public Examination of the University of Queensland or an examination accepted by the Senate as equivalent thereto in the subjects of Economics, Modern History, Mathematics A., and French or German, may pursue the course set out hereunder, and elect to sit for the final examination for Honours in Economics either as provided above, or one year earlier.

In the First Year—

(*a*)—

(i.) French I. or German I.;

(ii.) Modern History, including general Economic History;

(iii.) Economics I., extended course;

(iv.) Pure Mathematics I.

(*b*) Essays and tutorial classes as prescribed above, for the second year.

In the Second Year—

(*a*)—

(i.) English I.;

(ii.) Constitutional History and Political Science I.;

(iii.) An approved Law subject *or* Statistical and Actuarial Mathematics;

(iv.) Economics II.

(*b*) Attend lectures in Logic and Psychology I. and tutorial classes as prescribed above, for the third year.

In the Third Year—

(*a*)—

(i.) Constitutional History and Political Science II.;

(ii.) Economics III.;

(iii.) Political Philosophy;

(iv.) Ethics.

(*b*) Thesis as prescribed above, for the fourth year.

Holders of the Diploma in Commerce of the University of Queensland or graduates with Honours in History may be admitted as Third Year Students to the four-year course of the Honours School of Economics and have the work of the remaining years suitably apportioned. Graduates with Honours in History who have passed the annual examination in French I. or German I.,* Philosophy I., Pure Mathematics I., and Economics II. (or reached a sufficiently high standard in the economic portion of their final examination) may be admitted to the Fourth Year in the Honours School of Economics.

* *Note.*—A pass in Latin I. or Greek I. will be accepted in place of French I. or German I., provided the candidate can satisfy the Lecturer in French or German (as the case may require) of his ability to understand books on economic subjects written in French or German or some other modern foreign language.

D.—MENTAL AND MORAL PHILOSOPHY, AND EDUCATION.

Professor Scott Fletcher and Mr. Kyle.

X. PHILOSOPHY.

PART I.

Philosophy I. includes Logic, Psychology, and elementary ethical and philosophical theory.

LOGIC.

Chief attention will be given to Deductive Logic, but the general nature and the methods of Induction will also be discussed.

Prescribed text-book.

Minto: Logic, Inductive and Deductive (Murray).

Students might also consult with advantage the text-books on Logic by Creighton and Mellone.

PSYCHOLOGY.

A description and analysis of the main states of consciousness and modes of behaviour.

Prescribed Text-books.

Woodworth: Psychology, A Study of Mental Life (Methuen).
McDougall: An Introduction to Social Psychology (Methuen).

ETHICS AND PHILOSOPHY.

An introduction to the more important ethical and metaphysical conceptions.

Prescribed text-books.

Johnston: An Introduction to Ethics (Macmillan).
Webb: History of Philosophy (Home University Library).

Books for reference and additional reading.

Bosanquet: Essentials of Logic (Macmillan).
Welton and Monahan: Intermediate Logic, third edition, revised (Univ. Tut. Press).
Myers: An Introduction to Experimental Psychology (Cambridge Manuals).
James: Text-book of Psychology (Macmillan).
Watson: Psychology from the Standpoint of a Behaviorist (Lippincott).

PART II.

Philosophy II. (Logic and Psychology) and Philosophy IIA. (Ethics and Metaphysics) are alternative second parts of Philosophy I. for the purposes of Rule 5 under the Statute relating to the Degree of Bachelor of Arts.

Evening Courses are provided in Philosophy II. and Philosophy II.A, in alternate years, for Evening Students.

PHILOSOPHY II.—LOGIC AND PSYCHOLOGY.

Logic is taken conjointly with Psychology as a single course.

LOGIC.

A detailed study will be made of the Methods of Induction and of the Principles of Science. Some lectures will be devoted to the discussion of the problems of Logic as treated by Kant, Bosanquet, and Bradley.

Prescribed text-books.

Mill: System of Logic (Longmans). Book III. to be studied.
Welton and Monahan: Intermediate Logic, third edition, revised (Univ. Tut. Press).
Whitehead: Science and the Modern World (Cambridge).

For reference and additional reading.

Venn: Empirical Logic (Macmillan).
Adamson: A Short History of Logic, ed. Sorley (Blackwood).
Dotterer: Philosophy by Way of the Sciences (The Macmillan Co.).

PSYCHOLOGY.

The Course will include:—

(*a*) General Theory of Experience.
(*b*) Abnormal and Social Psychology.
(*c*) Experimental Psychology.

Prescribed text-books.

Mitchell: Structure and Growth of the Mind (Macmillan).
McDougall: An Introduction to Social Psychology (Methuen)
Ginsberg: The Psychology of Society (Methuen).
Hart: The Psychology of Insanity (Cambridge Manuals).
Tasman Lovell: Dreams (Monograph Series, No. II., A.A.P.P., Sydney).

For reference and additional reading.

Haldane: Human Experience (Murray).
James: Principles of Psychology, two vols. (Macmillan).

Ward: Psychological Principles (Cambridge).
Tansley: The New Psychology (Allen and Unwin).
Myers and Bartlett: A Text-book of Experimental Psychology, two vols., third edition (Cambridge).

Reference will be made to the texts of Locke, Hume, Kant, and Green.

Students will attend laboratory demonstrations and perform such experiments as may be prescribed from time to time.

PHILOSOPHY IIA.—ETHICS AND METAPHYSICS.

Ethics is taken conjointly with Metaphysics as a single course.

ETHICS.

The lectures will deal in alternate years with (*a*) the principles of Ethics and Social Philosophy, (*b*) the general history of ethical thought.

Prescribed text-books.

1934.

Ethics and Social Philosophy:—
Seth: Ethical Principles (Blackwood).
Taylor: Socrates (Peter Davies).
Aristotle: Ethica Nicomachea, trans. by W. D. Ross (Oxford).
Green: Prolegomena to Ethics (Oxford).
Bosanquet: The Philosophical Theory of the State (Macmillan).

For reference and additional reading.
Ginsberg: The Psychology of Society (Methuen).
Mackenzie: A Manual of Ethics, sixth edition, revised (Univ. Tut. Press).
Sorley: A History of English Philosophy (Cambridge).
Watson: Selections from Kant (Maclehose).

1935.

The History of Ethical Thought:—
Barbour: Ethical Theory (The Hassell Press, Adelaide).
Aristotle: Ethica Nicomachea, trans. by W. D. Ross (Oxford).
Butler: Three Sermons on Human Nature, etc., ed. W. R. Matthews (Bell's English Classics).
Mill: Utilitarianism (Everyman's Library).
Watson: Selections from Kant (Maclehose).
Sorley: A History of English Philosophy (Cambridge).

For reference and additional reading.
Green: Prolegomena to Ethics (Oxford).
Selby-Bigge: British Moralists, two vols. (Oxford).
R. A. P. Rogers: A Short History of Ethics (Macmillan).

Honours students in the School of Philosophy will take both of the above courses in successive years.

METAPHYSICS.

The lectures will deal in alternate years with (*a*) the history of the development of philosophical doctrine, (*b*) the main problems discussed in metaphysical inquiry.

Prescribed Text-books.

1934.

History of Philosophy:—

A. K. Rogers: Student's History of Philosophy (The Macmillan Co.).

Descartes: Discourse on Method, etc. (Everyman's Library).

Locke: An Essay concerning Human Understanding (Routledge).

Watson: Selections from Kant (Maclehose).

For reference and additional reading.

Royce: The Spirit of Modern Philosophy (Houghton, Mifflin Co.)

Sellars: Principles and Problems of Philosophy (The Macmillan Co.)

Sorley: A History of English Philosophy (Cambridge).

1935.

Metaphysical Problems:—

Mackenzie: Outlines of Metaphysics (Macmillan).

B. Russell: Problems of Philosophy (Home University Library).

Descartes: Discourse on Method, etc. (Everyman's Library).

Locke: An Essay concerning Human Understanding (Routledge).

Watson: Selections from Kant (Maclehose).

For reference and additional reading.

Taylor: Elements of Metaphysics (Methuen).

The New Realism, by Holt and others (The Macmillan Co.)

A. K. Rogers: Student's History of Philosophy (The Macmillan Co).

Honours students in the School of Philosophy will take both of the above courses in successive years.

XI. EDUCATION.

No student may take the course in Education unless a pass has been secured in Philosophy, Part 1.

Prescribed text-books.

Theory of Education—

Bagley: The Educative Process (The Macmillan Co.).

Adams: Modern Developments in Educational Practice (Univ. of London Press).

Findlay: The School (Home University Library).

Ward: Psychology Applied to Education (Cambridge).

History of Education—

Monroe: A Brief Course in the History of Education (The Macmillan Co.).
Quick: Educational Reformers (Longmans).
Milton: Tractate on Education, ed. O. Browning (Cambridge).
Locke: Some Thoughts concerning Education, ed. Quick (Cambridge).
Herbert Spencer: Education (R.P.A. Reprints).

For reference and additional reading.

Ballard: Mental Tests and Group Tests of Intelligence (Hodder and Stoughton); or
Terman: The Measurement of Intelligence (Harrap).
MacCunn: The Making of Character (Cambridge).
Nunn: Education, its Data and First Principles (Arnold).
Birchenough: History of Elementary Education in England and Wales (Univ. Tut. Press, London).

HONOURS SCHOOL OF MENTAL AND MORAL PHILOSOPHY.

I. Candidates for the Degree of Bachelor of Arts with Honours in Mental and Moral Philosophy shall attend lectures and pass the examinations for the ordinary degree in Philosophy, Part I., Part II. (Logic and Psychology), and Part IIA. (Ethics and Metaphysics—both courses), Economics, Part I. (or Constitutional History and Political Science, Part I.), Greek Literature and Art, English, Part I. and one language other than English, Part I., or (omitting English), Parts I. and II., before they sit for their Final Honours Examination.

II. The Final Honours Examination consists of papers in the History of Philosophy, Psychology, Ethics and Social Philosophy, Logic and Epistemology, and Critical Metaphysics.

III. In September of the year prior to their Final Honours Examination candidates shall present a dissertation upon some subject connected with their studies, the title of which shall have been submitted to the Professor of Philosophy (not later than the end of March) and approved by the Faculty of Arts. The dissertation will be taken into account in determining a candidate's classification in Final Honours.

IV. Students of the third year shall attend such lectures and demonstrations as are from time to time prescribed by the Professor.

V. The following works are prescribed for special study:—

(*a*) Psychology:—

James: Principles of Psychology, two vols. (Macmillan).
Mitchell: Structure and Growth of the Mind (Macmillan).
McDougall: An Outline of Abnormal Psychology (Methuen)
Ward: Psychological Principles (Cambridge).

Reference will also be made to the principles of Social Psychology and to the psychological problems of industry.

(*b*) Ethics and Social Philosophy:—

Green: Prolegomena to Ethics (Oxford).

Bradley: Ethical Studies (Oxford).

Green: Principles of Political Obligation (Longmans).

Bosanquet: The Philosophical Theory of the State (Macmillan).

(*c*) Metaphysics and the History of Philosophy:—

Taylor: Elements of Metaphysics (Methuen).

Ward: Naturalism and Agnosticism (Black).

Caird: The Critical Philosophy of Kant, two vols. (Maclehose).

Bradley: Appearance and Reality (Allan and Unwin).

Rogers: English and American Philosophy since 1800 (The Macmillan Co.).

Sorley: A History of English Philosophy (Cambridge).

Bergson: Creative Evolution (Macmillan).

(*d*) Logic and Epistemology:—

Bradley: Essays in Truth and Reality (Oxford).

Bosanquet: Logic, two vols. (Oxford).

Joachim: The Nature of Truth (Oxford).

Bradley: The Principles of Logic, two vols. (Oxford).

Dampier-Whetham: A History of Science (Cambridge).

(*e*) Texts:—

Selby-Bigge: British Moralists, two vols. (Oxford).

Berkeley: The Theory of Vision and other Writings (Everyman).

Hume: Treatise of Human Nature, two vols. (Everyman's Library).

Leibniz: Monadology, etc., trans. by Latta (Oxford).

Rousseau: Social Contract (Everyman's Library).

Kant: Critique of Pure Reason, trans. by Kemp Smith (Macmillan).

Kant: Critique of Practical Reason, etc., trans. by Abbott (Longmans).

Kant: Critique of Judgment, two vols., trans. by Meredith (Oxford).

Hegel: Logic, trans. by Wallace (Oxford).

Robert Bridges: Testament of Beauty (Oxford).

(*f*) Students will also be expected to show some acquaintance with current philosophical journals.

(*g*) Those interested on the literary side should make a study of the following writers:—Coleridge, Carlyle, Wordsworth, Tennyson, Browning, Emerson.

E.—MATHEMATICS, PURE AND APPLIED.

Professor Simonds, Miss Raybould, Mr. McCarthy.

XII. PURE MATHEMATICS.

PART I.

Details of work.

A.

A Course of about sixty Lectures as in *B*.

A Supplementary Course of about thirty Lectures will also be given. This course should be attended by all candidates for Honours in Mathematics.

Books recommended.

Higher Algebra: Milne.
Plane Trigonometry: Carslaw.
Modern Plane Geometry: Richardson and Ramsay.
Solid Geometry: Jackson.
Geometrical Conics: Caunt and Jessop.
Analytical Geometry: Somerville.
Introduction to Calculus: Carslaw.

B.

A Course of about sixty Lectures on—

Plane Trigonometry.
Algebra.
Elementary Analytical Geometry.
Elementary Solid Geometry.
Elementary Infinitesimal Calculus.

Books recommended.

Plane Trigonometry: Carslaw.
Co-ordinate Geometry: Coleman.
Solid Geometry: Jackson.
Introduction to Calculus: Carslaw.

PART II.

A Course of about sixty Lectures on—

Differential and Integral Calculus.
Elementary Differential Equations.
Properties of Conics and other Special Curves.

Book recommended.

Infinitesimal Calculus: Lamb.

XIII. APPLIED MATHEMATICS.

PART I.

A Course of about sixty Lectures on—

Elementary Dynamics, Statics, and Hydrostatics.

Book recommended.
Elementary Dynamics of Particle and Rigid Body: Barnard.

PART II.

A Course of about sixty Lectures on—
Dynamics of a Particle.
Statics and Dynamics of a Rigid Body.
Hydrostatics.

Books recommended.
Statics: Lamb.
Dynamics: Lamb.

XIV. STATISTICAL AND ACTUARIAL MATHEMATICS.

A Course of about sixty Lectures on—

(1) Classification of Statistical Data and analysis thereof by use of Mean, Standard Deviation, etc.
(2) Method of Finite Differences, with special application to Interpolation Formulae, etc.
(3) The Euler-Maclaurin Theorem; Stirling's expression for n!; formulae for approximate integration.
(4) The Theory of Probability, with special reference to probable errors of statistical constants and theory of sampling.
Analysis of Time-Series by methods of Lexis and Charlier.
(5) Curve-fitting.
(6) Correlation.

Note.—This Course does not treat of professional practice.

HONOURS SCHOOL OF MATHEMATICS.

Tutorial Classes will be held three times a week for second-year students proceeding to a degree with Honours in Mathematics.

These classes will read—
Elementary Analytical Geometry of Three Dimensions.
Differential Equations.
Differential and Integral Calculus.
Projective Geometry.
Dynamics of a Particle.

Third Year.

Classes will be held daily for third-year students in the school of Mathematics.

These classes will read—
Higher Analytical Geometry.
Mathematical Analysis.
Theory of Attractions.
Rigid Dynamics.
Hydrodynamics.

During the first and second term of each year a Course of about twenty Lectures on Spherical Trigonometry and Astronomy will be given.

Students in Spherical Trigonometry and Astronomy should provide themselves with—

Astronomy for Surveyors: Chapman.
Nautical Almanac for current year, and
Spherical Trigonometry (McClelland and Preston, or Todhunter and Leatham).

F.—LAW.

Professor Cumbrae-Stewart, K.C.

XV. ROMAN LAW.

The Course in Roman Law will consist of about sixty Lectures, covering the History of Roman private law and legal procedure, the text of the Institutes of Justinian, and an outline of the later development and influence of Roman Law.

Book recommended.

Moyle: Imperatoris Justiniani Institutiones, two vols., 5th Edition. (Clarendon Press.)

XVI. PUBLIC INTERNATIONAL LAW.

A Course of about sixty Lectures, illustrating the development and growth of International Law in Europe and the elements of Modern Public International Law covering the changes since the last European War.

Books recommended.

Pitt-Cobbett: Leading cases on International Law, 4th Edition.
Hall, W. E.: Treatise on International Law, 8th Edition.
Publications of the League of Nations—Selections.

XVII. CONSTITUTIONAL LAW.

This will consist of three Sections—A, B, and C—the first two being Constitutional History and Political Science, Parts I. and II. respectively (Course No. VIII.), and the third, Section C, being a Course of about thirty Lectures covering a discussion of the leading cases on Constitutional Law in England, Queensland, and Australia, and on the Statutes and Documents relating thereto, about half of which will be devoted to matters of Federal concern.

As students taking Constitutional Law, Section C, are required to have passed in Constitutional History and Political Science I., and in Constitutional History and Political Science II., they are presumed to have read—

The Law and Custom of the Constitution—Sir W. Anson;
Introduction to the Law of the Constitution—A. V. Dicey; and
The Commonwealth of Australia—Sir W. Harrison Moore;

and to be familiar with the History and Outlines of the British Constitution, the Constitutions of the Commonwealth of Australia and of Queensland, and the leading Statutes relating thereto.

They are recommended, in addition to the books for reference or further reading set out in the Calendar for Course VIII., to refer to—

Quick and Garran: Annotated Constitution.
Quick: Legislative Powers of the Commonwealth.
Kerr: The Law of the Australian Constitution.
Bernays: Queensland Politics during Sixty Years.
Bernays: Queensland—Our Seventh Political Decade.
Mitchell: What Every Australian Ought to Know.

They may with advantage refer to *Halsbury, "Laws of England," articles "Constitutional Law"* and *"Dependencies, Colonies, and British Possessions."*

The leading cases on Constitutional Law in England, Queensland, and Australia to be discussed in the course of the Lectures will include those dealt with in Thomas and Bellott's "Leading Cases in Constitutional Law" and selected Commonwealth and Queensland cases.

XVIII. JURISPRUDENCE.

A Course of about sixty Lectures on the Science of Law, including the Origin and Nature of Law, the Nature and Classification of Legal Duties and Rights, the History of Law and of Legal Science, the Leading Concepts of Law, and the Interpretation of Written Documents.

Books recommended.

Pollock: First Book of Jurisprudence.
Holland: Elements of Jurisprudence, 13th Edition.
Salmond: Jurisprudence, 7th Edition.
Jenks: Short History of English Law.
Beal: Cardinal Rules of Legal Interpretation.

XIX. MUSIC.

HARMONY.

All details of usual notation. All harmonic combinations usual in part-writing of not more than four parts.

The addition of not more than three parts to either a figured or an unfigured bass. The harmonization of melodies in not more than four parts, i.e., by the addition of not more than three other parts.

Books prescribed.

Stewart Macpherson: Melody and Harmony.
Kitson: The Art of Counterpoint.

Text-books recommended.

Kitson: Evolution of Harmony.

Percy Buck: Unfigured Harmony.

HISTORY OF MUSIC.

A general knowledge of the character of the various forms of music composed between the years 1600 and 1850.

Book prescribed.

Colles: The Growth of Music.

Text-books recommended.

Parry: Summmary of Musical History (Novello).

Parry: The Evolution of the Art of Music.

Buck: History of Music (Benn Library).

EXTERNAL STUDENTS.

The subjects offered to External Students for 1934 are:—

Latin I.; English I.; French II.; British History I.; British History II.; Modern History; Economics I.; Constitutional History and Political Science I.; Philosophy I.; Philosophy II.A; Education; Pure Mathematics I.; Pure Mathematics II.; Roman Law; Constitutional Law; Music.

Note.—Any subject for which less than three applications are received by 31st January, 1934, will be withdrawn from the above list.

Faculty of Science—B.Sc. Degree.

A.—PURE MATHEMATICS,

B.—APPLIED MATHEMATICS,

C.—STATISTICAL AND ACTUARIAL MATHEMATICS.

See Faculty of Arts, Courses XII., XIII., and XIV.

FOURTH YEAR HONOURS.

Candidates for Honours in Mathematics in the Faculty of Science will sit for their final examination in the March after their fourth Long Vacation.

The course of work will be that prescribed for Mathematics Honours in the Faculty of Arts, with such additional reading as may be prescribed.

D.—BIOLOGY, PART I.

Professor Goddard, Mr. Cayzer, Dr. Herbert, Mr. Perkins,

Biology I. includes Botany I and Zoology I.

Students in Science, Agriculture, Medicine, and Arts attending Courses in Biology must complete Biology I. in the First Year.

Dental Students take Zoology I. only.

Forestry Students take Botany I. only.

Botany and Zoology rank as separate subjects during Second, Third, and Fourth Years of the Science Curriculum.

XX. ZOOLOGY, AND XXI. BOTANY.

(*a*) An Introductory Course (ten Lectures) dealing with Characteristics of Living Matter, Amœba as a type of Unicellular Organism, the Cell, Mitosis, Development of Multicellular Animal from fertilised egg (morula, blastula, gastrula, germinal layers, differentiation of tissues, development of organs), Comparison of Ovum and Spermatozoan, Unicellular Animal in relation to Multicellular Animal. Pleurococcus and Chlamydomonas as types of unicellular plant organisms, the Vegetable Cell, relation of unicellular plant to higher plants, differentiation of tissues. Comparison of a typical Animal with a typical Plant; Chlorophyll. Origin and Evolution of Animal and Plant forms. Osmosis in relation to Animal and Plant organisation. Homology and Analogy. Classification.

All students must attend this Course.

(*b*) Botany I. includes—

(1) A course of about thirty-five Lectures dealing with—Thallophyta (Cyanophyceæ, Myxomycetes, Algæ, Fungi, Lichens), Bryophyta (Mosses and Liverworts), Pteridophyta (Pteris, Aspidium, Selaginella), and Spermaphyta (Gymnosperms and Angiosperms); as well as the study of Plant Histology and Elementary Plant Physiology; and, if time permits, a brief introduction to the problems of Organic Evolution and Genetics.

(2) A Practical Course involving attendance in the Laboratory for two hours per week for three terms.

The laboratory work is supplemented by field work during terms and vacations.

Note-books must be kept up to date and handed in when requested; the records contained therein are assessed at regular intervals.

Text-book.

Lowson: A Text-book of Botany.

(*c*) Zoology I. includes—

(1) A course of about forty-five Lectures dealing with the following groups of Animals:—Protozoa, Porifera, Cœlenterata, Platyhelminthes, Nemathelminthes, Echinodermata, Annulata, Arthropoda, Mollusca, Urochorda, Cephalochorda, Vertebrata.

This course involves a study of the structure and life-history of respective types of the above groups, development of the Frog, development of the Chick, Fœtal Membranes of Mammals, Elementary Comparative Anatomy and Physiology of Vertebrata; and, if time permits, a brief introduction to the problems of Organic Evolution and Heredity.

(2) A practical course involving attendance in the Laboratory for two hours per week for three terms.

The laboratory work is supplemented by field work during terms and vacations.

Note-books must be kept up to date and handed in when requested; the records contained therein are assessed at regular intervals.

Text-book.

Borradaile: Manual of Zoology (latest Edition).

E.—ZOOLOGY, PART II. AND PART III.

Zoology II.

Second Year.

The following Courses, dealt with in about ninety Lectures, and a minimum of seven hours' laboratory practice per week, have been arranged primarily for students preparing to graduate with the B.Sc. Degree:—

(1) Morphology, Embryology and Physiology of Invertebrata, covered in lectures and practical classes, involving six hours per week for two terms, and three hours per week for third term.

Text-books.

Parker and Haswell: Text-book of Zoology, vol. i.
Sedgwick: Text-book of Zoology, vols. i. and iii.
MacBride: Embryology of Invertebrata.
Minchin: Introduction to the Protozoa.
Hickson: Corals.
Treatise on Zoology (edited by Lankester).
Cambridge Natural History.
Encyclopædia Britannica (Zoological Articles).
Guyer: Animal Micrology.

(2) Entomology, practical work involving one hour per week for two terms, and four hours per week for third term.

Text-books.

Tillyard: Insects of Australia and New Zealand.
Comstock: Introduction to Entomology.
Lefroy: A Manual of Entomology.

(3) A Course of ten Lectures during last term dealing with Theories of Organic Evolution.

Text-books.

Various volumes available in Departmental Library.

All students in Zoology II. will be expected to give attention to the working out of the life-history of three specified Australian Insects, and will be expected to hand in at the end of the year a collection of 300 species of classified Insects, as well as a representative set of slides made during the Course in Zoology II.

Special Course.—A Course in Agricultural Zoology, involving two Lectures and four hours' laboratory work per week, is delivered to Agriculture Students of the Second Year during three terms (See Faculty of Agriculture.)

Zoology III.

Third Year.

The following Courses, dealt with in about ninety Lectures, including a weekly seminar, and a minimum of nine hours' laboratory practice per week, have been arranged primarily for students preparing to graduate with the B.Sc. Degree:—

(1) A Course in the Comparative Anatomy, Embryology and Physiology of Chordata, dealt with in lectures and practical classes involving a minimum of six hours per week for three terms.

Text-books.

Kingsley: Comparative Anatomy of Vertebrata.
Schafer: Essentials of Histology.
Cunningham: Text-book of Anatomy (chapters dealing with the Nervous System).
Lillie: Development of the Chick.
Cambridge Natural History.
Parker and Haswell: Text-book of Zoology, vol. ii.
Sedgwick: Text-book of Zoology, vols. ii. and iii.
Treatise on Zoology (edited by Lankester).
Graham Kerr: Embryology of Vertebrates.
Halliburton: Handbook of Physiology.
Reynolds: The Vertebrate Skeleton.
Kingsley: Skeleton of Vertebrata.
Williston: Osteology of the Reptiles.

Other volumes recommended in class, and available in the Departmental Library.

(2) A practical Course in Histology, involving a minimum of two hours per week during three terms.

Text-books.

Schafer: Essentials of Histology.
Guyer: Animal Micrology.

(3) A Course of ten Lectures dealing with Animal Distribution, Zoogeographical Problems and Animal Ecology, given during Third Term.

Text-books.

Various volumes available in Departmental Library.

(4) A Course of five Lectures and five practical meetings of two hours each, dealing with Cytology, given during Third Term.

Text-books.

Cowdry: Cytology.
Wilson: The Cell in Development and Inheritance.
Agar: Cytology.
Doncaster: Cytology.

(5) A Course in Biological Philosophy and Genetics—One Lecture per week during First Term.

Text-books.

Crew: Animal Genetics.
Babcock and Clausen: Genetics in Relation to Agriculture.
Other volumes available in Departmental Library.

(6) Seminar—Preparation and discussion of set biological problems—one hour per week.

The laboratory work laid down for students attending Zoology II. and Zoology III. is supplemented by field work done during terms and vacations.

Records of all work of a practical nature must be kept in an approved note-book, and such note-book must be handed in when requested. The records contained therein will be assessed at regular intervals. Students must hand in at the end of the year a representative set of slides made during the Zoology II. and Zoology III. Courses.

All practicable facilities will be offered to any approved person for the prosecution of original research.

FOURTH YEAR—HONOURS.

During this year students will be expected to pursue a set course of reading, to prepare essays on three set topics, to read and be prepared to discuss current zoological literature, to carry out field investigations, and attend such special Lecture courses as may be prescribed. It is expected that at least thirty hours per week will be devoted to this work.

F.—BOTANY, PART II. AND PART III.

BOTANY II.

Second Year.

The following Courses, dealt with in about ninety Lectures, and a minimum of seven hours' laboratory practice per week, have been arranged primarily for students preparing to graduate with the B.Sc. Degree.

Agriculture II. Students attend certain of these Courses, as indicated below.

(1) Morphology, Phylogeny, Physiology, Ecology, Geographical Distribution and Geological History of Thallophyta, Bryophyta and Pteridophyta, arranged as follows:—

(*a*) Algæ—Ten Lectures and ten two-hour practical periods during First Term for Science II. and Agriculture II. students.

(*b*) Bryophyta—Ten Lectures and ten two-hour practical periods during First Term for Science II. students.

(*c*) Fungi—Twenty Lectures and twenty two-hour practical periods during Second and Third Terms for Science II. and Agriculture II. students, together with an extra two-hour period during Third Term.

(*d*) Pteridophyta—Ten lectures and ten two-hour practical periods during Second Term for Science II. students.

Text-books.

West: Algæ.
Oltmann: Morphologie und Biologie der Algen.
(Algæ) Strasburger: Text-book of Botany.
Coulter, Barnes, and Cowles: Text-book of Botany, vol. i.
(Fungi) Gwynne Vaughan: Ascomycetes.
De Bary: Comparative Morphology and Biology of the Fungi.
Harshburger: Plant Mycology.
McAlpine: Rusts of Australia.
McAlpine: Smuts of Australia.
(Bryophyta) Cavers: Bryophyta.
Campbell: Mosses and Ferns.
Bower: Origin of a Land Flora.
Chamberlain: Methods in Plant Histology.

(2) Fossil Botany—Ten Lectures and ten practical periods of two hours each during Third Term for Science II. students, in conjunction with morphological studies in Pteridophyta.

Text-books.

Scott: Studies in Fossil Botany.
Seward: Fossil Plants.

(3) Physiology (Respiration, Nutrition, Growth and Movement)—Twenty Lectures and twenty two-hour practical periods during First and Second Terms for Science II. and Agriculture II. students.

Text-books.

Jost: Physiology.
Palladin: Plant Physiology.
Haas and Hill: Chemistry of Plant Products.

(4) Systematics of Angiosperms—One one-hour practical period per week during the Three Terms for Science II. and Agriculture II. students.

The note on a later page in reference to collections has a very special application to this section of the work.

Text-book.

Willis: Flowering Plants and Ferns.

(5) A Course of ten Lectures during the last Term dealing with Theories of Organic Evolution for Science II. and Agriculture II. students.

Various volumes available in Departmental Library.

BOTANY III.

Third Year.

The following Courses, dealt with in about ninety Lectures, including a weekly seminar and a minimum of nine hours' laboratory practice per week, have been arranged primarily for students preparing to graduate with the B.Sc. Degree.

Agriculture III. students attend certain of these Courses, as indicated below.

(1) Morphology of Gymnosperms and Angiosperms, Phylogeny, Physiology, Ecology, Geographical Distribution and Geological History of Gymnosperms and Angiosperms—Twenty Lectures and twenty three-hour practical periods arranged as follows:—

Agriculture III. students—First and Second Terms.

Science III. students—Second and Third Terms.

Text-books.

Coulter and Chamberlain: Special Morphology of the Angiosperms.

Coulter and Chamberlain: Special Morphology of the Gymnosperms.

Coulter, Barnes, and Cowles: Text-book of Botany, vols. i. and ii.

Strasburger: Text-book of Botany.

Haberlandt: Physiological Plant Anatomy.

Stevens: Plant Anatomy.

(2) Fossil Botany of Angiosperms and Gymnosperms—Five Lectures and five two-hour practical periods during Third Term for Science III. students.

Text-books.

Scott: Studies in Fossil Botany.

Seward: Fossil Plants.

Chamberlain: Morphology of Gymnosperms.

(3) Distribution and Principles of Ecology of Plants—Twenty Lectures during First and Second Terms for Science III. and Agriculture III. students.

Text-books.

Warming: Ecology.

Schimper: Plant Geography.

(4) Physiology—Twenty Lectures and thirty three-hour practical periods during First and Second Terms for Science III. and Agriculture III. students.

Text-books.

Jost: Physiology.
Palladin: Plant Physiology.
Pfeffer: Physiology of Plants.
Haas and Hill: Chemistry of Plant Products.
Goebel: Organography of Plants.

(5) Cytology—A Course of five Lectures and five practical meetings of two hours each dealing with Cytology, given during Third Term to Science III. students.

Text-books.

Cowdry: Cytology.
Wilson: The Cell in Development and Inheritance.
Agar: Cytology.
Doncaster: Cytology.

(6) Biological Philosophy, Heredity, Variation, etc.—Ten Lectures given during Third Term to Science III. students.

Text-book.

Babcock and Clauson: Genetics in relation to Agriculture.
Other volumes available in Departmental Library.

(7) Economic Botany—Poisonous Plants and Weeds, Uses, etc. (done in conjunction with the Course on Ecology).

(8) Forest Botany—Twenty Lectures and twenty two-hour practical periods during First and Second Terms for Science III. and Agriculture students.

(9) Systematics of Angiosperms—One one-hour practical period per week during three terms, together with an additional four hours per week during the latter half of Third Term. See note *re* collections for Science III. and Agriculture III. students.

(10) Seminar—Preparation and discussion of set biological problems—one hour per week for Science III. and Agriculture III. students.

The laboratory work laid down for students attending Botany II. and Botany III. is supplemented by field work done during terms and vacations.

Records of all work of a practical nature must be kept in an approved note-book, and such note-book must be handed in when requested. The records contained therein will be assessed at regular intervals.

All practicable facilities will be offered to any approved person for the prosecution of original research.

Students in Botany II. and Botany III. will be required to hand in at the end of the year all preparations and collections made during the year. A list of the requirements in this connection is posted in the Department.

FOURTH YEAR—HONOURS.

During this year students will be expected to pursue a set course of reading, to prepare essays on three set topics, to read and be prepared to discuss current biological literature, to carry out field investigations, and attend such special Lecture-courses as may be prescribed. It is expected that at least thirty hours per week will be devoted to this work.

Special Course.—A Special Course in Plant Pathology, involving sixty Lectures and 120 hours' practical work during First and Second Terms for Agriculture III. students. (For details see Faculty of Agriculture.)

G.—CHEMISTRY.

XXII. CHEMISTRY.

Professor Bagster, Dr. Jones, Mr. Hines, and Mr. O'Connor.

Lecture Courses.

FACULTY OF SCIENCE.

Part I.—First Year.

The Course comprises—

(*a*) A discussion of the fundamental laws of Chemistry, based upon the study of the chief non-metals.
(*b*) A discussion of the laws governing the behaviour of aqueous solutions.
(*c*) A systematic study of the chief metals, based upon the Periodic Law.
(*d*) A short Course in Elementary Organic Chemistry.

Part II.—Second Year.

(*a*) A Course of forty-five Lectures on General Physical Chemistry.
(*b*) A Course of ten Lectures on Inorganic Chemistry.
(*c*) A Course of thirty-five Lectures on Systematic Organic Chemistry.

Part III.—Third Year.

Chemistry III.A.

(*a*) Physical Chemistry: 30 lectures.
(*b*) Inorganic Chemistry: 10 lectures.
(*c*) Organic Chemistry: 20 lectures.
(*d*) Atomic and Molecular Theory: 15 lectures.
(*e*) Industrial Chemistry: 15 lectures.

Chemistry III.B.

(*a*) Organic Chemistry: 50 lectures.
(*b*) Physical Chemistry: 10 lectures.

(*c*) Part (*d*) of Chemistry III.A.
(*d*) Part (*e*) of Chemistry III.A.

Chemistry III.

(*a*) Parts (*a*), (*b*), (*d*) and (*e*) of Chemistry III.A.;
(*b*) Part (*a*) of Chemistry III.B.

Advanced Course for students taking Chemistry III. as the complete work of the third year: 30 lectures.

Fourth Year.—Honours.

Students who have not studied Chemistry III. A. and B. during their third year must complete that portion which has been omitted. This may be done during the fourth year.

During the fourth year of their courses, students must pursue a course of reading, attend special courses of lectures, carry out laboratory investigations of minor problems, and such other laboratory work as may be prescribed.

Special stress will be laid on the study of current chemical literature and the writing of essays on set subjects.

At least thirty hours per week must be devoted to the work of the course.

DEPARTMENT OF APPLIED CHEMISTRY.

Part I.—First Year.

As for students in Pure Science.

Part II.—Second Year.

As for students in Pure Science.

Part III.—Third Year.

Students in Applied Chemistry will attend the Chemistry III.A. Course for pass students in Pure Science.

Part IV.—Fourth Year.

(*a*) A Course of Lectures on the Principles Underlying the Selection of Process and the Design of Plant.

(*b*) A Course of Lectures on Chemical Technology dealing with—

(i.) Processes;
(ii.) Materials.

FACULTY OF ENGINEERING.

Part I.—First Year.

Students will attend the course as prescribed for the first year of Science.

Part II.—Second Year.

Students during their second year will attend a special course, mainly practical, leading to the course in Engineering Chemistry in the third year.

Part III.—Third Year.

(*a*) *For Civil Engineering and Mechanical and Electrical Engineering Students*—

A Course of Lectures on Engineering Chemistry and Metallography.

(*b*) *For Chemical Engineering Students*—

Course (*a*), and in addition a course of about thirty lectures each in (1) Physical and Inorganic Chemistry and (2) Organic Chemistry.

Part IV.—Fourth Year.

Course (*a*) and prescribed portions of Course (*b*) for Science students.

Laboratory Work.

Faculty of Science.

First Year—Four hours per week.

Second Year—Eight hours per week.

Third Year—

Pass Students—Twelve hours per week for either Chemistry III.A or III.B.

Chemistry III. with second subject—Fifteen hours per week.

Chemistry III. with Advanced Chemistry—Eighteen hours per week.

Students in Applied Science—Fifteen hours per week.

Fourth Year—

Students in Applied Science—Fifteen hours per week.

Honours Students—A minimum of thirty hours per week, inclusive of lectures.

Faculty of Engineering.

First Year—Four hours per week.

Second Year—Three hours per week, for about two terms, commencing in the first term.

Third Year—

Civil Engineering and Mechanical and Electrical Engineering Students—Fifty hours during first and second terms.

Chemical Engineering Students—Nine hours per week.

Fourth Year—Fifteen hours per week.

Books prescribed or recommended for Students in the Department of Chemistry.

For First-year Students—

Alexander Smith: Inorganic Chemistry;

Macbeth: Organic Chemistry; or

Donington: Class-book of Chemistry, Part V.

Bruce and Harper: Practical Chemistry.

Students who have not studied Chemistry before entering on their University course are advised to provide themselves in addition with one of the simpler books on Elementary Chemistry, such as—

Donington: Class-book of Chemistry, Parts I.-IV.

For Second-year Students—

Inorganic Chemistry—

Philbrick and Holmgard: Theoretical and Inorganic Chemistry.

For Reference.

Caven and Landor: Systematic Inorganic Chemistry.

Organic Chemistry—

Kipping and Kipping: Text-book of Organic Chemistry; or

Read: Organic Chemistry.

Physical Chemistry—

Findlay: The Phase Rule;

Lewis: Text-book of Physical Chemistry, vol. i.; or

Lowry and Sugden: Class-book of Physical Chemistry.

Students proceeding to Physical and Inorganic Chemistry, Part III., are advised to provide themselves with Lewis's Physical Chemistry.

Laboratory Text-books—

Cumming and Kay: Quantitative Chemical Analysis;

Adams and Johnson: Laboratory Experiments in Organic Chemistry.

For Third-year Students—

Chemistry III.A and Chemistry III.B—

Schmidt: Translated Rule. Organic Chemistry.

Levy: Introduction to Industrial Chemistry.

Weston: Identification of Carbon Compounds.

For Reference.

Sidgwick: Electron Theory of Valance.

Chemistry III.A—

Lewis: Text Book of Physical Chemistry, Vols. I. and II.

For Reference.

Glasstone: Recent Advances in Physical Chemistry.

Spencer: Practical Physical Chemistry.

Stewart: Recent Advances in Physical and Inorganic Chemistry.

Chemistry III.B—

Gattermann: Laboratory Methods of Organic Chemistry (1932 Edition).

For Reference.
Stewart: Recent Advances in Organic Chemistry.

For Engineering students—

Chemistry II. and III.—

Lowry and Sugden: Class Book of Physical Chemistry.
Leighou: Chemistry of Engineering Materials.

Chemistry III. (practical).—Stillman: Engineering Chemistry.

For Fourth-year students—

Applied Science and Chemical Engineering—

Martin: Industrial Chemistry, 3 volumes.
Badger and McCabe: Elements of Chemical Engineering.

For Reference.
Walker, Lewis, and McAdams: Principles of Chemical Engineering.

Selected portions of reference books provided in the Library will be prescribed.

A number of reference books are provided for the use of students in the Library of the Chemistry Department, which must on no account be removed from the Library.

H.—GEOLOGY AND MINERALOGY.

XXIII. GEOLOGY AND MINERALOGY.

Professor Richards, Dr. Bryan, and Dr. Whitehouse.

PART I.

For Arts, Science, Engineering, and Agriculture Students.

Lectures.—

(*a*) A course of sixty Lectures on Physiography, Crystallography, Mineralogy, Petrology, Tectonic Geology, and the Economic Geology of Clays, Building Stones, and Road Metals.

(*b*) A course of thirty Lectures on Cosmogony, Palæontology, and Australian Stratigraphy.

Laboratory Practice.—Three hours per week in studying Crystals, Rock-forming Minerals, Common Ores and Vein Stones, Rocks, Elementary Fossils, Geological Maps and Sections.

Field Work.—Approximately Ten Excursions during the year, including one of several days' duration.

PART II.

For Science Students.

Lectures.—

(*a*) A course of thirty Lectures on Economic Geology.*

(*b*) A course of thirty Lectures on Crystallography, Optical Mineralogy and Petrology.

(*c*) A course of thirty Lectures on Palæontology and Stratigraphy.

Laboratory Practice.—At least seven hours per week in studying Crystals, Minerals, Rocks (both microscopically and megascopically), Blowpipe Analysis of Minerals, Palæontology, Field Mapping, and the Preparation of Rock Sections.

Field Work.—As prescribed.

For Agriculture Students.

Lectures.—A course of sixty Lectures on Crystallography, Optical Mineralogy, Petrology, Rock Weathering, Ground-water, Wells, Springs, Artesian Water, Irrigation, Soils, Soil Surveys, and Mineral Fertilisers.

Laboratory Practice.—Four hours per week in studying Minerals, Rocks and Soils both microscopically and megascopically, and in Field Mapping.

Field Work.—As prescribed.

PART III.

For Science Students.

Lectures.—

(*a*) A course of thirty Lectures on Optical Mineralogy and Petrogenesis.

(*b*) A course of twenty Lectures on Major Geological Problems.

(*c*) A course of thirty Lectures on Evolutional Palæontology.

(*d*) A course of ten Lectures on the Geological Structure of the Continents.

Seminars.—Each student will prepare one essay each term as prescribed for reading and discussion.

Laboratory Practice.—As prescribed. At least nine hours per week.

Field Work.—As prescribed.

Fourth Year—Honours.

Lectures.—

(*a*) A course of ten Lectures on Advanced Geology.

(*b*) A course of twenty Lectures on Problems of Australian Geology.

(*c*) A course of twenty Lectures on Stratigraphical Palæontology.

General.—During the year students will pursue a prescribed course of reading and prepare essays on three set topics. Students will also read and be prepared to discuss current geological literature.

* Fourth-year students of Applied Science will attend this course.

Field Work.—As prescribed. (This will include the original geological investigation of some selected area.)

Special Course.

For students of Civil Engineering, Part III., a course of ten Lectures on Geological Problems affecting Engineering.

Text-books.

PART I.

Faculties of Arts, Science, Engineering, and Agriculture.

Text-book of Geology (Physical Geology): Longwell, Knopf, and Flint (John Wiley and Sons); or

Introduction to Geology: Vol. I., 3rd edition, by W. B. Scott (Macmillan and Co.); or

Text-book of Geology: Lake and Rastall (Arnold).

Elements of Mineralogy: F. Rutley (Murby and Co.).

Petrology for Students. A. Harker (Cambridge University Press).

Palæontology: H. Woods (Cambridge University Press).

PART II.

Faculty of Science.

Minerals and the Microscope: H. G. Smith (Murby and Co.).

Petrology for Students: A. Harker (Cambridge University Press).

Palæontology: H. Woods (Cambridge University Press).

Economic Mineralogy: T. Crook (Longmans, Green, and Co.).

Geology of Metalliferous Deposits: R. H. Rastall (Cambridge University Press).

Applied Science.

Economic Mineralogy: T. Crook (Longmans, Green, and Co.).

Geology of Metalliferous Deposits: R. H. Rastall (Cambridge University Press).

Faculty of Agriculture.

Minerals and the Microscope: H. G. Smith (Murby and Co.).

Petrology for Students: A. Harker (Cambridge University Press).

Soils—Their Origin, Constitution, and Classification: G. W. Robinson (Murby and Co.).

PART III.

Faculty of Science.

Rock Minerals: Iddings (Wiley and Sons).

Igneous Rocks, vol. i.: Iddings (Wiley and Sons).

Principles of Petrology: G. W. Tyrrell (Methuen and Co.).

Physico-Chemical Geology: R. H. Rastall (Arnold).

Minerals in Rock Section: Luquer (Van Nostrand).

Outlines of Palæontology: Swinnerton (Arnold).
Geographical Essays: Davis (Ginn and Co.).
Structural Geology: Nevin (John Wiley and Sons).

I.—PHYSICS.

XXIV. PHYSICS.

Professor Parnell, Assistant Professor Lusby, and Mr. Rimmer.

PART I.

Lectures.

A Course of three Lectures weekly on Physical Measurements, Mechanics and Properties of Matter, Heat, Magnetism and Electricity, and Light.

Practical Work.

Three hours per week in the Laboratory.

Text-books recommended.

Text-Book of Physics: Duncan and Starling.
Practical Physics: Bower and Satterly.

PART II.

For Science and Engineering Students.

Courses of one Lecture per week each on—
General Properties of Matter and Heat;
Magnetism and Electricity.

(Additional for Science Students.)

A Course of one Lecture per week on—
Light, Sound, and Heat.

Practical Work.

For Engineering Students: Three hours per week in the laboratory in first and third terms. Six hours per week in second term.

For Science Students: Six hours per week in the laboratory.

Text-books recommended.

Properties of Matter: Poynting and Thomson.
Heat: Poynting and Thomson.
Sound: Poynting and Thomson.
Electricity and Magnetism: Starling.
Light: Edser.
Practical Physics: Glazebrook and Shaw.

PART III.

Lectures—

A course of about seventy Lectures.

Laboratory Work—

Nine hours per week.

Courses of reading will be prescribed in conjunction with the Lecture Courses.

FOURTH YEAR—HONOURS.

Students will carry out such laboratory work, do such reading, and attend such lectures as may be prescribed.

The course will include one systematic experimental investigation and also the reading and discussion of papers in current journals.

Students will be expected to be in attendance at the University for at least thirty hours per week.

Faculty of Engineering—B.E. Degree.

Professor Hawken, Dr. Boyd, Mr. Ross, Mr. Munro, and Mr. Stoney. Mr. James (Part Time).

XXV. PRINCIPLES OF TECHNICAL DRAWING.

FIRST YEAR.

A Course of Twenty Lectures and Sixty Hours' Practical Work in Drawing Office.

Scales, Constructions relating to Straight Lines, Polygons, Circles, and Circular Arcs, Conic Sections, Cycloidal Curves, Involutes and Spirals. Principles of Orthographic Projection. Problems on Straight Lines and Planes. Projections of Solids. Projection from Oblique Planes. Interpenetration of Solids. Development of Surfaces. Construction of Paper Models. Isometric and Oblique Projection. Principles of Perspective Drawing.

Text-book.

D. A. Low: Practical Geometry and Graphics.

Reference Books.

Adler: The Theory of Engineering Drawing.

Smith: Practical Descriptive Geometry.

Harrison and Baxendall: Practical Plane and Solid Geometry for Advanced Students.

XXVI. ENGINEERING DRAWING AND DESIGN.

PART I.—FIRST YEAR.

A Course of Thirty Lectures.

Object of Machine Design. Mechanical Development and Specification. Theory and Production. Calculations. Notes and Records. Method of Design. Sketches. Analysis of Construction and Forces. Theoretical Design. Practical Modifications. Plans and Specifications.

Constructive Mechanics. Forces and Moments. Beams. Diagrams of Bending Moment and Shearing Forces. Cantilever. Concentrated and Distributed Load. Beam supported at ends—any arrangement of loads. Tension, Compression and Torsion. Working

Stresses. Graphic Methods, Resultants, Moments, Simple Frames, Bows Notation. Discussion of formulæ— $f = \frac{P}{A} : M = \frac{fI}{y}$.

Materials—their uses and properties.

Fastenings—Bolts, Studs, &c. Keys, Pins, and Cotters. Shafts and Couplings. Friction Clutches. Journals. Bearings. Belts. Pulleys. Toothed Wheels. Riveted Joints. Pipes and Flanges.

Drawing Office—A Course of 150 Hours.

Lettering and Printing. Drawing of Details from Working Drawings. Sketching of Machine Parts. Preparation of Tracings.

Text-book.

Spooner: Machine Design, Construction, and Drawing.

Reference Books.

Lineham: Mechanical Engineering.

Kent: Mechanical Engineer's Pocket Book.

PART II.—SECOND YEAR.

Drawing Office—A Course of 210 Hours.

Designing and Making Complete Working Drawings of Details, such as—Crane Hook, Plummer Block, Stop and Safety Valves, Cocks, Thrust Bearings, Wall Brackets, Problems involving the design of spur, bevel, and worm gearing.

Complete Design of a Simple Vertical or Horizontal Steam Engine covering general arrangement and detail drawings.

The Lecture Courses for the above work are included in the Courses in Heat Engines, Part II., and Applied Mechanics.

Text-book.

Spooner: Machine Design, Construction, and Drawing; *or*
Norman: Principles of Machine Design.

PART III.—THIRD YEAR.

Drawing Office—300 Hours.

Design and Complete Working Drawings of a Small Structure, such as a Travelling Gantry, Lifting Footbridge, Wharf Crane, Tower for Small Suspension Bridge, Roof Truss, Plate Web Girder.

The student is expected to acquire a working knowledge of construction and drawing of details of joints and members for working conditions, the types of examples set having this object rather than the compilation of stress sheets.

The Lecture Course is included under Civil Engineering, Part I.

Students in Mechanical Engineering will be required, in addition to the above, to attend a course in Mechanical Design, including design of boilers, internal combustion engines, &c.

Text-book for Mechanical Design.
Norman: Principles of Machine Design.

PART IV.—FOURTH YEAR.

A.—CIVIL ENGINEERING.

The Design and Specification of an Engineering Scheme (or portion of such), such as Road or Railway Bridge, Works for Water Supply or Sewerage, Dry Dock, Aeroplane Shed, High Building, Tower, &c.

The Lecture Course is included under Civil Engineering.

B.—MECHANICAL AND ELECTRICAL ENGINEERING.

The Design of Mechanical and Electrical Machinery and the lay-out of Power Plants and Generating Stations and Preparation of Specifications.

XXVII. APPLIED MECHANICS.

SECOND YEAR.

A Course of Fifty Lectures.

(*a*) *Mechanics*: Constrained Motion, Relative Motion, Instantaneous or Virtual Centres. Centrode and Axode, Relative Velocities of Points and Bars in Mechanisms, Steam Engine Mechanism and its Inversions, Principle of Virtual Velocities applied to Mechanisms, Velocity and Acceleration Curves, Velocity Diagrams. Toothed Gearing, Wheel Trains, Epicyclic Trains.

(*b*) *Dynamics of the Steam Engine:* Influence of Short Connecting Rods, Correction of Indicator Diagrams for Inertia, Pressure on Crankpin, Cushioning, Twisting Moment Diagrams, Twisting Moment on Crankshaft, Flywheels, Coupling Rods, Connecting Rods. Balancing. Friction, Journals and Bearings, Lubrication. Governors.

(*c*) *Elasticity*: Stress and Strain, Characteristics of Materials. Shearing Forces, Compound Stresses. Strength of Cylinders under Internal Pressure, Lame's Theory

(*d*) *Beams*: Bending Moments and Shearing Force Diagrams, Modulus of Section, Neutral Axis, Unsymmetrical Sections, Sections of Uniform Strength, Slope and Deflection of Beams. Combined Bending and Direct Stresses.

(*e*) *Columns:* Long and Short Columns, Euler's Formula, Empirical Formulæ.

(*f*) *Torsion*: General Theory, Shafts, Polar Modulus for Circular Sections, Strength of Shafts in Torsion, Twisting of Shafts, Torsion meters. Whirling of Shafts. Springs.

APPLIED MECHANICS LABORATORY.

A Course of Sixty Hours.

Measurements of Efficiency and Mechanical Advantages of Simple Machines, such as Screwpress, Pulley Block, Differential

Pulley, Worm Wheel Crab, and Hydraulic Jack. Measurements of Friction Coefficients. Energy of Flywheel. Stresses in Simple Framed Structures. Simple Hydraulic Measurements. Fluid Friction. Characteristics of Lubricants. Calibration of Gauges. Balancing Four-crank Engine. Tension and Compression Tests of Small Specimens.

Text-book.

Goodman: Mechanics Applied to Engineering.

Reference Books.

Reuleaux: The Constructor.
Kennedy: Mechanics of Machines.
Inchley: Heat Engines.
Church: Mechanics of Engineering.
Cotterill: Applied Mechanics.
Dalby: Balancing.
Warren: Engineering Construction in Steel and Timber.
McKay: The Theory of Machines.

XXVIII. HEAT ENGINES.

PART I.—FIRST YEAR.

A Course of Ten Lectures.

Short History of the Development of Heat Motors. Elementary Theory of Heat Engines. Laws of Thermodynamics. Cycle of Operations of the Working Substance in a Heat Engine. Laws of Permanent Gases. Work done by an Expanding Fluid. Adiabatic Expansion. Isothermal Expansion. Carnot's Cycle of Operations. Efficiency of Carnot's Cycle. Reversed Carnot's Cycle. Efficiency of a Perfect Heat Engine.

Steam Engines: Slide valves. Lap and Lead. Angle of Advance. Construction of Valve Diagrams (Zeuner and Wave Form). Hypothetical Steam Engine Diagrams. Diagram Factor.

Reference Books.

Duncan: Steam and other Engines.
D. A. Low: Heat Engines.

PART II.—SECOND YEAR.

A Course of Fifty Lectures and Eighty Hours' Laboratory Practice.

Lecture Course.

Properties of Steam. Theory of the Steam Engine. Rankine's Cycle. Indicators. Indicator Diagrams. Hypothetical Diagrams. Diagram Factor. Cylinder Condensation. Jacketing. Ratio of Expansion. Two and Three Stage Expansion. Combined Diagrams.

Slide Valves and Valve Setting. Valve Diagrams (Zeuner, Wave Form) for Expansion Valves. Reversing Gears.

Design of a Compound Steam Engine in Detail. Sizes of Cylinders for a given Indicated Horse-power. Crankshafts. Connecting Rods. Piston Rods. Pistons. Glands and Stuffing Boxes Cylinders. Ports and Passages. Valves, Covers, Bed Plates and Framings. Bearings. Eccentrics, &c.

The Testing of Steam Engines and Boilers for Efficiency. Fuels. Combustion. Boilers (Fire and Water Tube). Leading Types and their Relative Suitability for various purposes. Transmission of Heat through Plates. Grate Surface. Heating Surface. Details of Construction. Riveted Joints. Stayed Surfaces. Stays, Furnaces. Chimneys. Fittings and Mountings. Board of Trade and Lloyd's Requirements. Maintenance and Operation.

Mechanical Refrigeration. Compressors. Air Compressors. Cold Air Engines.

Internal Combustion Engines. Cycles of Operation. Leading Types of Gas Engines. Suction Gas Plants. Producers. Oil Engines (for refined and crude oils). Petrol Engines. Power Ratings. Testing of Gas and Oil Engines for Efficiency.

Laboratory Course.

Drawing the Valve Diagrams and Setting the Valves of a Simple Engine with D and Piston Type Valve. Meyer Expansion Valve. Link Motions.

Use of Indicator and Brakes. Tests of Steam and Gas Engines for Mechanical Efficiency.

Preliminary Tests for Evaporative Capacity of Boilers. Steam Consumption Tests of an Engine.

Text-books.

D. A. Low: Heat Engines.

Lineham: Mechanical Engineering.

Seaton and Rounthwaite: Pocket Book of Marine Engineering Rules and Tables.

Reference Books.

Ewing: The Steam Engine and other Heat Engines.

Thurston: History of the Steam Engine.

Marks and Davis: Steam Tables.

Parsons: Steam Boilers.

PART III.—THIRD YEAR.

A Course of Sixty Lectures with Laboratory Practice.

Advanced Theory of Heat Engines. Thermodynamic Surface. Pressure Volume Path of Perfect Gases. Entropy. Entropy

Temperature Diagrams. Mollier's Diagrams for Steam (Entropy—total heat pressure—total heat). Conditions affecting Economy. Cyclical Flow of Heat in the Metal Cylinder Walls of Heat Engines. Detailed Consideration of Heat Losses. Standard Methods of Conducting Engine and Boiler Trials. Detailed Analysis of Data obtained from Trials.

Boiler-house Plant. Further Details with regard to Boilers. Superheaters. Economisers. Flues and Chimneys. Forced Draught. Fuel and Gas Analysis. Smoke Abatement. Pressure. Draught and CO_2 Recorders. Mechanical Stokers. Feed Pumps. Injectors. Piping Arrangements.

Further Consideration of Types of Steam Engines. Corliss Valve Gear. Drop Valve Gear.

Theory of Steam Turbines. Conversion of Heat into Velocity. The Turbine Cycle. Practical Losses. Effect of Vacuum and Superheat. Rate of Flow. Efficiency in directing Velocities. Design of Impulse and Reaction Turbines. Commercial Types and Applications.

Jet Condensers. Surface Condensers. Tube Surface. Surface Section Ratio. Cooling Towers. Evaporative Condensers. Air Pumps. Wet and Dry Systems. Types (Edwards, Leblanc, Kinetic, &c.).

Mechanical Refrigeration. Air Machines. Vapour Compression Machines. The Cycle. Choice of Fluid. Tonnage Rating. Compressors—various types of machines—absorption system.

Compressed Air. The Cold-air Engine. Cycle. Temperature Fall. Preheaters. The Compressor. Cycle. Form of Compression Curve. Jackets. Multi-stage Compression. Intercooling. Relation of Engine and Compressor. Losses. Efficiency. Design of Compressor. Commercial Types.

Internal Combustion Engines. Fuels. Gas Producers (Pressure and Suction). Action in the Producer. Producer Efficiency. Comparison of Gas Engine Cycles. Mixture. Compression. Ignition. Expansion. Scavenging. Standard Reference Diagram. Diagram Factor. Principles of Design and Efficiency. Governing. Commercial Internal Combustion Engines. Humphrey's Internal Combustion Pump. Results and Analysis of Tests.

Text-books.

Inchley: Heat Engines.
Ennis: Applied Thermodynamics for Engineers.

Books for Reference.

Thurston: Manual of the Steam Engine.
Bauer and Robertson: Marine Engines and Boilers.
Goudie: The Steam Turbine.

Lorenz, Pope, Haven, and Deane: Modern Refrigerating Machinery.

Carpenter and Diederichs: Internal Combustion Engines.

Hiscox: Compressed Air.

D. Clerk: The Gas, Petrol, and Oil Engine.

XXIX. CIVIL ENGINEERING.

INCLUDING MATERIALS TESTING.

PART I.—THIRD YEAR.

Seventy Hours' Lectures and Forty-five Hours' Laboratory.

The course, which includes Materials, Structures, and General Construction, is to be taken by all students in each of the departments—Civil, Mining, Mechanical and Electrical.

More advanced and exhaustive treatment is reserved for Fourth-year Civil Engineering.

When the demand arises, it is hoped that Specialist Courses in Civil Engineering may be arranged for a Fifth Year in the several branches: Structures, Railways, Hydraulic and Sanitary, Higher Surveying.

Materials.—Investigation of strains and stresses, tensile, compressive, bending, torsion; fundamental formulæ and measurements. Properties of cast iron, wrought iron, steel, alloys, stones, limes, mortars, brick, cement, concrete, timber (especially Australian), other engineering materials.

Various tests and testing machines, experimental data, average values, and modifications to be expected, micro-photography. Laboratory practice supplemented by study of standard results.

Structures.—A knowledge of Engineering Mechanics covered by the second-year syllabus is assumed. Students are expected to become familiar with the principles of theory and design of the more simple structures, and to acquire a thorough knowledge of design of details of members and joints; also, to practise the drawing up of specifications and estimates of costs.

Beams and Girders.—Position of moving loads for maximum bending moment and for maximum shear, moment of resistance, neutral axis, modulus of rupture, distribution and intensity of shear. Factors of safety, working stresses. Sizes and shapes to resist various stresses. Joints and connections, general features and details of design. Graphical and analytical methods of analysis. Stiffness of beams. Beams of uniform strength. Introduction to continuous girder theory and design.

Framed Structures.—Analysis of loads, dead load, wind and other live loads, conventional assumptions; empirical and other formulæ.

Stresses in members, outline summary of methods of investigation, graphic methods, analytic methods. Various types of roof and other trusses, trestles, bracing, three-hinged arches; methods suited to each. Sizes and sections best adapted for conditions imposed.

Tension members, compression members, design of joints pin and riveted: a short investigation of theory and design of columns, various formulæ.

Deflection of trusses, effect of shape on stiffness.

Reinforced Concrete.—An elementary treatment of principles, experimental data, design of beams and columns.

Masonry and Monolithic Structures.—Definitions, fundamental theory of internal stress, limiting pressures, ellipse of stress, earth pressure, water pressure. Design of small dams, weirs, arches, tunnels, piers, retaining walls.

Foundations.—Preliminary tests required, safe loads in various strata, tests and preliminary investigations; principles of construction in firm and in heavy ground; foundations for machinery; piles, grills, coffer dams, caissons.

General Construction.—An introductory course in several branches. Students are expected to do the reading of descriptive matter on lines indicated in lectures; also, to keep in touch with current engineering literature, and maintain a system of card indexing with regard to their reading.

Roads.—Various types in country and city; principles of location, ruling grades, tractive resistance, construction, durability of coverings used; provisions for drainage, principles of maintenance.

Railways.—Principles of location; estimates of revenue and maintenance; earthwork, drainage, permanent way; methods of working to ensure safety; interlocking signals; locomotive traction; types of locomotives.

Water Supply and Sanitary Engineering.—(Flow of water as applying to water supply and sewerage, pumping machinery, &c., are treated under "Hydraulics.")

Sources of supply above and below ground; amount of water required for various purposes; reservoirs; construction of dams, earth, masonry; headworks, filter beds, theory and design; distribution works, pipe lines and connections, conduits; influence of water supply on health.

Collection and disposal of sewage; sewage farms, discharge into streams or ocean; purification works; refuse destructors.

Harbours and Docks.—Harbour requirements, river mouths, maintenance of depth, effect of waves and tides; construction of breakwaters; foundations, materials; description of various harbours.

Construction of docks; various appliances, machinery and materials, dock walls, dock entrances, graving and repairing docks, jetties, wharves, piers.

Text-books.

Andrews: Theory and Design of Structures.
Vernon-Harcourt: Civil Engineering as applied to Construction.
Coane: Australian Roads.

Reference Books.

Warren: Engineering Construction in Steel and Timber, vol. i.
Raymond: Elements of Railroad Engineering.
Waddell: De Pontibus.
Ketchum: Steel Mill Buildings and Handbook.
Johnson: Materials of Construction.
Mills: Materials of Construction.
Morley: Strength of Materials and Theory of Structures.
Adams: Modern Sewerage Practice.

For more detailed and advanced study, see list under "Civil Engineering II."

PART II.—FOURTH YEAR.

For Students in Civil Engineering only. During this year the student is expected to complete a thesis on an approved subject or a design in construction; encouragement is given, within limits, to original and specialised work.

Short courses of lectures by specialists in several of the branches have been arranged.

Instruction will be carried on by the Seminar system which may include formal lectures, but which will mainly endeavour to guide students' reading and practical work, and to fix and amplify the students' knowledge by discussion.

Students are required to read engineering journals and scientific papers bearing on the subjects treated, and to record their work by means of card indexing.

Materials and Structures.—Results of recent research, micro-photography of metals, more detailed treatment of strain and stress—redundant members—influence lines.

Higher Structures.—Arches without hinges, two-hinged arches, braced arches, suspension bridges, continuous girders, swing bridges, long-span bridges; modern loading and treatment; high buildings; erection stresses. Estimates and costs of work.

Reinforced Concrete.—Various applications, pipes, reservoir walls, dock walls, buildings, foundations, advanced theory and design.

General Construction.—Bridge piers, location, economic distribution; special foundations, coffer dams, open caisson, cribs, cylinders, deep foundations, methods of sinking, open cribs, dredging, pneumatic caisson, air locks. Theory and practice of pile foundations, screwed piles.

High dam design, curved dams; retaining walls (theory of earth pressure). Masonry arches, definitions, joints of rupture, elastic theory, methods of design, description of various existing types.

Roads.—The Good Road Problem, economy of proper alignment and construction, comparison of various coverings, road machinery; various types of drainage openings; principles of maintenance, traffic data. Pavements, foundations, Australian and foreign practice, macadam, asphalt, brick, pitching, wood, bitumen, concrete.

Tramway.—Types of traction, construction details, financial data, railless tramways.

Railways.—More detailed study of location; limiting economy of grades, curves, various gauges and types; train resistance; ruling grade; rolling stock and permanent way for various kinds of traffic; points and crossings, interlocking, signals, maintenance. Light railways, narrow-gauge railways, rack and other steep-grade railways.

Water Supply and Sanitary Engineering.—Necessity of water service; statistics of requirements and effect on public health; sources of supply, methods of collection, detail investigation of design and headworks and distribution works, measurement of supply. Systems of sewerage, conduit design, details of construction, subsoil drainage, disposal of sewage, disposal of garbage, destructors.

Rivers, Harbours, and Docks.—Action of rivers; measurement of discharge, protection of banks; locks, weirs, conservation of water, outlet works, training walls; problems in design; description of various harbours; materials used in construction of works: action of winds, waves, tides; breakwaters, dredging, lighting, coast protection; dock walls, entrances, dock gates, dock machinery, graving docks, wharves.

Canals, Irrigation.—Navigation canals, irrigation canals, description of locks and lock machinery; inclines, lifts; irrigation data, principles of irrigation, duty of water. Examples in foreign countries and in Australia.

Reference Books.

Hool and Kinne: Series of Practical Structural Engineering Handbooks.
Warren: Engineering Construction, vol. ii.
Morley: Theory of Structures, Strength of Materials.
Johnson Bryan and Turneaure: Modern Framed Structures.
Baker: Masonry Construction.
Patton: Practical Treatise on Foundations.
Cunningham: Harbour Engineering.
Colson: Notes on Dock and Dock Construction.
Moore and Silcock: Sanitary Engineering.
Tratman: Railway Track and Track Works.
Wellington: Railway Location.
Turneaure and Russell: Public Water Supplies.
Wilson: Irrigation Engineering.
Buckley: Irrigation Works in India.
Turneaure and Maurer: Principles of Reinforced Concrete.
Gillette: Handbook of Costs Data.
Merriman: Civil Engineer's Pocket Book.
Inst C.E.: British Standard Specifications.
A.C.E.S.A. Specifications.
Hool: Reinforced Concrete Construction.
Salmon: Columns.
Salmon: Materials and Structures.

Hool and Johnson: Engineers' Handbook.
Main Roads Commission Reports.
Irrigation Commission Reports.
Metcalfe and Eddy: Modern Sewerage Practice.
Waddell: Design of Bridges.
Coane: Road Construction.
Coultas: Theory of Structures.
McClelland: Estimates and Contract Costs.
Publications by the Staff.

XXX. HYDRAULICS.

PART A.—THIRD YEAR.

FOR STUDENTS IN ALL BRANCHES.

A Course of Thirty Lectures and Forty-five Hours' Laboratory Practice.

Part I.—Lecture Course.

Fluids at Rest.—Intensity of pressure. Pressure at any point in a fluid. Fluids at rest with free surface horizontal. Pressure head. Gauges.

Floating Bodies.—Conditions of equilibrium—Archimedes' Principle. Centre of buoyancy. Stability. Metacentre, stability of ships.

Fluids in Motion.—Steady motion. Stream-line motion. Definitions. Bernouilli's Theorem. Venturi meter. Extension of Bernouilli's Theorem.

Flow of Water through Orifices and over Weirs.—Coefficients. Various types of orifices. Notches and weirs. Derivation of equations. Thomson's principle of similarity. Empirical constants. Various forms of weirs. Recent research.

Flow through Pipes.—Losses. Hydraulic gradient. Hydraulic mean depth. Slope. Empirical formulæ.

Hydraulic Machines.—General: Impact of water on vanes. Water wheels. Turbines—reaction turbines—outward, inward, and axial flow. Design of vanes and blades. Calculation of losses and efficiency. Application of Bernouilli's Equations. Regulation of turbines. Choice of turbines. Impulse wheels. Pelton wheels.

Pumps.—Reciprocating pumps, plunger type and ram type. Centrifugal pumps and turbine pumps—general considerations, forms of vanes—design for a given discharge. Centrifugal head impressed on water. Losses in pumps. Efficiency of centrifugal and turbine pumps. Hydraulic ram. Lifting water by compressed air.

Internal Combustion Pumps.—Principles of action and general description of existing types.

Laboratory Practice.

Calibration of triangular and rectangular notches. Deduction of constants for various forms of orifices under various heads. Tests of centrifugal pumps. Test of Pelton wheel. Calibration of water meters. Tests of Francis turbine. Tests of reciprocating pumps, ram and plunger type. Flow of water in pipes and in an open channel.

Text-book.

Lea: Hydraulics.

Reference Books.

Higgins: Centrifugal Pumps.
Unwin: Treatise on Hydraulics.
Merriman: Treatise on Hydraulics.
Gibson: Hydraulics.
Church: Hydraulic Motors.
Green: Pumping Machinery.

PART B.—FOURTH YEAR.

FOR STUDENTS IN CIVIL ENGINEERING.

A Course of Ten Lectures and Thirty Hours' Laboratory and Field Practice.

Flow of liquids in open channels and in pipes. Discussion of various theories and results of experimental research. Hydraulic principles involved in the design of water supply, sewerage, and irrigation works. Sources and measurements of water supply. Computations of run-off. Hydraulics of wells. Non-uniform flow. Changes of level due to obstructions. The Backwater Function Flow round river bends.

Laboratory and Field Work.

Channel Experiments—Pipe Experiments—Effects of Bends—River Discharge, Measurements, Cross Sectioning, Use of Floats, &c.—Current Meter.

Reference Books.

Ganguillet and Kutter: Flow of Water in Open Channels.
Moore and Silcock: Sanitary Engineering.
Fidler: Calculations in Hydraulic Engineering.
Gibson: Hydraulics.
Turneaure and Russell: Public Water Supplies.
Merriman: Hydraulics.
Higgins: Water Channels.
Parker: Control of Water.

XXXI. SURVEYING.

PART I.—THIRD YEAR.

A course of sixty Lectures and 125 hours' Field and Office Work, to be taken by students of the third year in Civil Engineering; for students of the third year in Mechanical, Electrical, and Mining Engineering, the course will consist of forty Lectures and 60 hours' Field and Office Work. Students are expected to acquire a working knowledge of the various instruments, and especially familiarity by constant practice with use and adjustments of the level and theodolite, together with the calculations pertaining; also, with the keeping of field records systematically and correctly.

Principles and practice of chaining with chain, tapes, and long wires; corrections for sag, temperature, &c. Slope chainage and computations; surveys with chain alone.

Methods used in surveying for locating points. Short history of the art of surveying. Theory and description of various instruments with their adjustments (compass, theodolite, level, plane-table, barometer, clinometer); calculations pertaining to surveying. Drawing office instruments, plotting, and plan drawing. Elementary stadia survey. Railway location curves, transition curves.

Earthwork and calculations of volumes; estimates of cut and fill; prismoidal formulæ, application and modifications; cross sections; contour lines.

Solution of simple problems in land survey and engineering.

Survey of streams; measurement of discharge by floats, current meters, &c.

Elementary field astronomy; location of meridian and use to check survey.

Elementary mine surveying, including mine surveying problems and special methods on the surface and below; transfer of the meridian below ground; tunnel alignment; survey of bore holes.

Practice work throughout the year is essential, and includes one week's camp in the August vacation. Students in Civil Engineering and Mining will go into the field during vacation between third and fourth years.

Text-book.

Park: A text-book of Theodolite Surveying and Levelling.

Reference Books.

Cardew: Pocket Manual of Surveying.
Wells and Clay: Field Engineer's Handbook.
Middleton and Chadwick: A Treatise on Surveying.
Brough: Treatise on Mine Surveying.
Harris: Australian Handbook for Government Surveyors.
Johnson and Smith: Theory and Practice of Surveying.
Boulton: Practical Coal Mining (surveying portion).
Chapman: Astronomy for Surveyors.

PART II.—FOURTH YEAR.

To be taken by Civil Engineering students. The course will cover the ground required by an Authorised Surveyor.

Reconnaissance survey; refinements of survey work; tacheometry, topographical survey; curve ranging; setting out; levelling; extended practice with instruments; barometrical levelling; hypsometry; land surveying problems; conditions, Australian and foreign; city surveying; identification survey; subdivision of lands. Earthwork volumes, calculation tables.

Field astronomy, determination of latitude, azimuth and time by the several methods; elementary geodesy, convergence of meridians; correction of surveys; least squares; projection of maps; systems

of keeping field records, plotting and drawing. Hydrographic surveying, the three-point problem, location of soundings.

Practical Work.—One day per week throughout the Terms, and one week of the August vacation.

Reference Books.

Crandall: Geodesy and Least Squares.
Gribble: Preliminary Survey and Estimates.
Doolittle: Practical Astronomy.
Hayford: Text-book on Geodetic Astronomy.
Merriman: Precise Surveying and Geodesy.
Briggs: The Effects of Errors in Surveying.
The Instructions and Regulations of the various Australasian States.

XXXII. BUILDING CONSTRUCTION AND ARCHITECTURE.

ALTERNATIVELY IN THIRD AND FOURTH YEARS.

For Students in Civil Engineering and Chemical Engineering.

Building Construction.

Foundations.—Foundations for various soils, reinforced foundations, pile foundations.

Brickwork.—Limes and cement, various bonds, hollow walls, &c.

Stonework.—Constituents of building stones, Queensland building stones, different kinds of masonry work, construction of masonry work, cornices, &c.

Carpentry.—Australian building timbers, construction of floors, roofs, partitions, &c.

Joinery.—Doors, windows, skirtings, panelling, jamb linings, staircases, &c.

Iron and Steel Work.—Girders, roof principals, columns and stanchions, fire protection in buildings.

Plumbing.—Plumbing in connection with buildings, sanitary plumbing.

Drainage.—Laying of drains, manholes, various kinds of traps, &c.

History of Architecture.

Features of the following styles, with considerations of prominent examples of them:—

Egyptian and Assyrian, Greek, Roman, Byzantine, Romanesque, Early English Gothic, Decorated Gothic, Perpendicular Gothic, and Renaissance.

XXXIII. ELECTRICAL ENGINEERING.

THIRD YEAR.

I. A course of thirty Lectures and sixty hours' Laboratory Practice for third-year Civil, Mechanical, Electrical, and Mining Engineers.

Construction of direct and alternating current generators and motors, characteristics of various types, and applicability for different purposes, rotary converters, boosters, transformers, switchgear, controllers, instruments, direct and alternating current distribution systems, storage batteries and their operation, lighting, wiring. Fire Underwriters' regulations.

II. A course of thirty Lectures for third-year Mechanical and Electrical Engineers.

Calculation of open circuit characteristics, coefficient of leakage, field coils, estimation of copper, effects of various factors on weight of copper in field coils, armature windings for direct-current machines, size and number of slots, estimation of copper, iron losses in practical machines, load loss, ventilation and permissible watts per square inch, calculation of output for given temperature rises, commutators, brushes, commutation, calculation of reactance voltage, design of commutation poles, equalizing rings, efficiency and loss in direct-current machines, compounding, method of selection of size of machine for given output and speed, heating on other than continuous running, short-time runs, overload.

Theory of alternating currents, form factor, vectors, inductances, transmission line drop, growth of flux, condensers, capacity of transmission lines, measurement of power, transformers, vector diagram, short-circuit diagram, regulation, alternators, vector diagram voltage rise and fall, short-circuit characteristic methods of determining leakage reactance, induction motors, Heyland diagram.

Laboratory Course.

Switchboard operation, testing machines for efficiency, heating and regulation, calibration of instruments, location of faults.

Text-book.

Standard Handbook for Electrical Engineers (McGraw, publisher).

FOURTH YEAR.

III. A course of sixty Lectures and 180 hours' Laboratory Practice for fourth-year Electrical and Mechanical Students.

Electrical and mechanical design of direct and alternating current generators and motors, static transformers, rotary converters, automatic reversible boosters, lifting magnets, starters, controllers and regulators, condensers, switch gear, distribution systems, long-distance transmission lines, power station layouts, electric traction, storage battery engineering, lighting, cable laying and wiring, power factor correction with rotary and static condensers and phase advancers, economics of design of machinery and installations, preparation of estimates and specifications.

Laboratory Course.

Separation of losses in machines, efficiency, temperature, and regulation tests of direct-current, single-phase, and polyphase

machines and transformers, calibration of instruments, synchronising and resonance effects, oscillograph tests, cable testing, lamp testing, extra high tension tests, absorption and mechanical tests of line insulators, testing of transformer oils, characteristics of lightning arresters.

Text-books.

McAllister: Alternating-current Motors.

Parshall and Hobart: Electric Railway Engineering.

Hay: Electric Distributing Networks.

Electric Journals and Journal of Institution of Electrical Engineers.

Miles Walker: Specification and Design of Dynamo Electric Machinery.

Barr and Archibald: Design of Alternating-current Machinery.

Drysdale and Jolley: Electrical Measuring Instruments.

XXXIV. MECHANICAL ENGINEERING.

FOURTH YEAR.

For Students in Mechanical and Electrical Engineering only.

During this year the student will be required to complete a thesis on an approved subject or the design of some selected mechanical or electrical plan or apparatus: encouragement is given within limits to original and specialised work.

Instruction will be carried on by the Seminar system, which will endeavour mainly to guide students' reading and practical work and fix and amplify the students' knowledge by discussion. Some formal lectures will also be given by the staff and by honorary lecturers who are specialists in some particular line of engineering.

Joint sessions with the Civil Engineering Seminar will occasionally be held to discuss topics of common interest.

The scope of the work will include the design of generating stations, economics of power generation, methods of testing boilers, steam plant, internal combustion engines, refrigerating plants, air compressor pumps, turbines, preparation of estimates, organisation, cost of production, and the commercial aspect of engineering generally.

A considerable portion of the students' time will be spent in carrying out tests of steam plant, boilers, internal combustion engines, refrigerating plants, &c., and in investigating special problems in connection therewith.

Students are required to read engineering journals and scientific papers bearing on the subjects treated and to record their work by card indexing.

The results of all investigations and tests carried out by the student are required to be presented in the form of precise reports which are preserved as a record of the year's work.

XXXV. SPECIAL LECTURES AND COURSES.

Fitting and Machining.

Instruction by a skilled mechanic is given to students of first and fourth years. Practical work is done on Saturday mornings in the workshops of the Central Technical College.

Reinforced Concrete.

A course of five Lectures in the third year and ten Lectures in the fourth year.

Third Year: Fundamental theory of design and distribution of stresses in beams and columns. Calculations of extreme fibre stresses and moments of resistance; methods of shear reinforcement with calculations of stresses; bond stresses. Complete design of the more common types of reinforced concrete members such as floor slabs, rectangular beams, tee beams, and columns. Reference Books—Hool: Reinforced Concrete Construction, vol. i.; Hool and Johnson: Concrete Engineers' Handbook.

Fourth Year: Advanced theory and design. Combined bending and direct stresses. Deflections. Application of general principles of design of higher structures to reinforced concrete construction such as continuous girders, incomplete and redundant structures, monolithic building construction, arch analysis and design.

The student is expected to familiarise himself with the various types of structures commonly built in reinforced concrete.

Scientific proportioning, mixing, placing, and curing of concrete and the resulting effect on its strength.

Specifications for design and construction, and city building regulations.

Engineering Economics.

Six Lectures by the Professor of History and Economics to all Fourth-year Students.

(*a*) Instruction in Terms and General Principles of Economics and Business Management;

(*b*) Direction of Reading; and

(*c*) Discussion of a few selected Topics.

Business Organisation, Management, and Practice.

A Course of Twelve Lectures.

(*a*) *Organisation and Management:* General review of requirements and main features to be introduced when planning an ideal organisation. Detailed review of the principles and basic factors essential for efficient management and control.

(*b*) *Business Practice:* Conditions governing the purchase and sale of goods. Forms and documents used in connection with purchases and sales. Banks and their functions. Cheques. Bills of exchange. Promissory notes. Forms and documents used in connection with the receipt and payment of money. Commercial relations between persons. Sole traders. Partnerships. Companies.

(*c*) *Manufacturing Costs:* General survey of the principles of costing. Relationship of costing to business efficiency. Elements of cost. Divisions of cost and allocation thereof to manufactured articles. Stores records. The routine of purchasing, recording, and

issue of materials to jobs. Wages records. The routine of time-keeping and the methods of determining and apportioning wages costs. Standards of measurement for allocating on cost. General mechanism of cost accounting.

RAILWAY SIGNALLING.

Three Lectures and demonstration in the field.

ELECTRIC WELDING.

Two Lectures and demonstration.

SUB-STATION ENGINEERING.

Three Lectures and one demonstration.

Diploma in Mechanical and Electrical Engineering.

SYLLABUS.

FIRST YEAR.

(*a*) Mathematics.

(*b*) Mechanical Drawing.

MATHEMATICS.

Algebra: As for the University Junior Public Examination with the following additional:—The Three Progressions: The Properties and Use of Logarithms.

Geometry: As for the University Junior Public Examination, with the following additional:—Ratio and Proportion, Loci, Inverse Points, Elementary Solid Geometry.

Trigonometry: Up to and including solution of triangles.

MECHANICAL DRAWING.

Lecture Courses.

(*a*) Technical Drawing: Scales. Constructions relating to Straight Lines, Polygons, Circles, and Circular Arcs. Conic Sections. Cycloidal Curves, Involutes, and Spirals. Principles of Orthographic Projection. Elementary Problems on Straight Lines and Planes. Projections of Solids. Interpenetration of Solids. Development of Surfaces. Isometric and Oblique Projection. Principles of Perspective Projection.

(*b*) Object of Machine Design. Mechanical Development and Specification. Theory and Production. Calculations. Notes and Records. Method of Design. Sketches. Analysis of Construction and Forces. Theoretical Design. Practical Modifications. Plans and Specifications. Constructive Mechanics. Forces and Moments. Beams. Diagrams of Bending Moment and Shearing Forces.

Cantilever. Concentrated and Distributed Load. Beam Supported at ends—any arrangement of loads. Tension, Compression and Torsion. Discussion of formulæ—$f=\frac{P}{A}$: $M=\frac{fI}{\gamma}$. Working Stresses.

Materials—their uses and properties. Lubrication. Fastenings—Bolts, Studs, &c. Keys, Pins, and Cotters. Shafts and Couplings. Friction Clutches. Journals. Bearings. Belts. Pulleys. Toothed Wheels. Riveted Joints. Pipes and Flanges.

Drawing Office Practice.

(*c*) Technical Drawing: Students should complete a series of exercises illustrative of the problems considered in class-work.

(*d*) Drawing: Lettering and printing. Drawing of details from working drawings. Sketching of machine parts. Preparation of tracings.

(*e*) Advanced drawing of machine details and assemblies.

(*f*) Design of a simple machine in detail.

In the first two years of the course Parts (*a*), (*c*), and (*d*) should be covered.

In the third year Parts (*b*) and (*e*) should be covered and in the fourth year Part (*f*).

Text-book.

Spooner: Machine Design, Construction, and Drawing.

Reference Books.

Lineham: Mechanical Engineering.
Kent: Mechanical Engineer's Pocket-book.

SECOND YEAR.

(*a*) Applied Mathematics.

(*b*) Physics.

(*c*) Mechanical Drawing.

APPLIED MATHEMATICS.

Kinematics: Displacement, Velocity, Acceleration. Motion of Particle in Straight Line with Constant Acceleration. Acceleration due to Gravity. Elementary Theory of Vectors with Special Application to Composition of Displacement, Velocity, Acceleration. Motion of Particle with Constant Acceleration in Direction Oblique to Path. Angular Velocity and Acceleration. Motion in a Circle. Simple Harmonic Motion.

Kinetics: The Laws of Motion. Mass, Momentum, Force, Work, Energy, Power. Conservation of Linear Momentum and Conservation of Energy. Collisions. Simple Pendulum. Conical Pendulum.

Statics: Reduction of a System of Forces in a Plane. Friction. Mass Centres. Equilibrium of Rigid Bodies in a Plane.

Hydrostatics: Fluid Pressure. Centre of Pressure. Conditions of Equilibrium of Floating Bodies. Stability for Non-rational Displacements. The Gas Laws.

PHYSICS.

Physics I.: As for University Junior Public Examination, with experimental work.

Physics II.: As for University Senior Public Examination, with experimental work.

THIRD YEAR.

(*a*) Physics.
(*b*) Applied Mechanics.
(*c*) Mechanical Drawing.

APPLIED MECHANICS.

Lecture Course.

Definition of a Machine. Steam Engine Mechanism and its Inversions. Velocity Diagrams. Toothed Gearing. Dynamics of the Steam Engine. Indicator Diagrams. Correction of Indicator Diagrams for Inertia. Twisting Moment Diagrams. Flywheels. Governors. Elements of Balancing. Friction of Journal and Bearings. Lubrication.

Stress and Strain. Characteristics of Materials. Shearing Forces. Bending Moments. Diagrams of Bending Moment and Shearing Force. Neutral Axis. Modulus of Section. Deflection of Beams. Long and Short Columns. Straight Line Formulæ. Torsion of Shafts. Polar Modulus for Circular Sections. Springs.

Laboratory Course.

Measurements of Efficiency and Mechanical Advantage of Simple Machines, such as Screw Press; Pulley Blocks; Differential Pulley Worm and Wheel; Geared Crane; Hydraulic Jack.

Measurement of Friction Coefficients. Energy of Flywheel. Deflection of Springs. Simple Tests of Materials in Tension, Compression, and Cross Breaking. Deflection of Beams.

Simple Hydraulic Measurements. Calibration of Gauges, Spring Balances, &c.

Text-book.

Goodman: Mechanics Applied to Engineering.

FOURTH YEAR.

(*a*) Heat Engines.
(*b*) Electrical Engineering.
(*c*) Machine Design and Drawing.

HEAT ENGINES.

A Course of Sixty Lectures and Eighty Hours' Laboratory Practice.

Lecture Course.

Short History of the Development of Heat Motors. Elementary Theory of Heat Engines. Laws of Thermodynamics. Cycle of Operations of the Working Substance in a Heat Engine. Laws of Permanent Gases. Work done by an Expanding Fluid. Adiabatic Expansion. Isothermal Expansion. Carnot's Cycle of Operations. Efficiency of Carnot's Cycle. Reversed Carnot's Cycle. Efficiency of a Perfect Heat Engine.

Properties of Steam. Elementary Theory of the Steam Engine. Rankine's Cycle. Indicators. Indicator Diagrams. Hypothetical Diagrams. Diagram Factor. Cylinder Condensation. Jacketing. Ratio of Expansion. Two and Three Stage Expansion. Combined Diagrams. Slide Valves and Valve Setting. Valve Diagrams (Zeuner Wave, form). Reversing Gears. Expansion Valves.

Design of a Compound Steam Engine in Detail. Sizes of Cylinders for a given Indicated Horse Power. Crankshafts. Connecting Rods. Piston Rods. Pistons. Glands and Stuffing Boxes. Cylinders. Ports and Passages. Valves. Covers. Bed Plates and Framings. Bearings. Eccentrics, &c. The Steam Turbine. Impulse Types. Reaction Types. Flow of Fluid through Nozzles. Angles of Blades and Nozzles. Exhaust Turbines.

The Testing of Steam Engines and Boilers for Efficiency.

Fuels. Combustion. Boilers (fire and water tube). Leading Types and their Relative Suitability for Various Purposes. Transmission of Heat through Plates. Grate Surface. Heating Surface. Details of Construction. Riveted Joints. Stayed Surfaces. Stays Furnaces. Chimneys. Fittings and Mountings. Board of Trade and Lloyd's Requirements. Maintenance and Operation.

Air Compressors. Cold-air Engines. Hot-air Engines.

Internal Combustion Engines. Cycles of Operations. Leading Types of Gas Engines. Suction Gas Plants. Producers. Oil Engines (for refined and crude oils). Petrol Engines. Power Ratings. Testing of Gas and Oil Engines for Efficiency.

Laboratory Course.

Drawing the Valve Diagrams and Setting the Valves of a Simple Engine with D and Piston Type Valve. Meyer Expansion Valve. Link Motions. Use of Indicator and Brakes. Tests of Steam and Gas Engines for Mechanical Efficiency.

Preliminary Tests for Evaporative Capacity of Boilers. Steam Consumption Tests of an Engine.

Text-books.

D. A. Low: Heat Engines.

Lineham: Mechanical Engineering.

Seaton and Rounthwaite: Pocket-book of Marine Engineering Rules and Tables.

Reference Books.

Ewing: The Steam Engine and other Heat Engines.
Thurston: History of the Steam Engine.
Marks and Davis: Steam Tables.
Parsons: Steam Boilers.

ELECTRICAL ENGINEERING.

Dynamos and Motors. Types. Magnet System. Armature. Excitation. Commutation. Commutating Poles. Applications of various Types. Alternators. Synchronous Motors. Rotary Converters. Transformers and Induction Motors.

Regulation and Starting. Starters and Controllers.

Distribution. Kelvin's Law. Mains and Branches. Losses. High-tension Mains. Insulators.

Generation. Power Stations. Choice of Plant. Switchboards, Hand-operated and Remote Control. Types of Indicating and Recording Instruments. Substations.

Lighting. Internal Lighting with Incandescent or Arc Lamps. External Lighting. Arc Lamps. Metal Filament Lamps. Vapour Lamps.

Wiring. House Wiring. Casing. Conduits. Fire Underwriters' Regulations. Joints. Cutouts and Switches.

Laboratory Course.

Losses in Machines. Efficiency and Regulation. Switchboard operation. Paralleling and Synchronising.

Calibration of Instruments as Voltmeter, Ammeter, Wattmeter, and Watthour Meter.

Jointing of Wires and Cables.

Testing and Adjusting Arc Lamps.

Armature Winding and Former Making.

Text-book.

Barr: Electrical Engineering.

Faculty of Commerce—Degree of B. Com.

GROUP A.

Modern History. (*See* Course VIIA.)
Economics I. (*See* Course IX.—Part I.)
Economics II. (*See* Course IX.—Part II.)
Economics IIA. (*See* Course IX.—Part IIA.)

XXXV.—ACCOUNTANCY.

Mr. E. H. George, Mr. A. F. Hess, Mr. O. Tuttle, Mr. J. Packman, Mr. I. S. Webley.

The subject of Accountancy is divided into two sections, and candidates must, except in special circumstances, pass in Accountancy Section I. before proceeding with the study of Accountancy Section II.

The Courses of instruction in Accountancy Section I., groups (*a*) and (*b*), and Accountancy Section II., consist each of approximately 40 lectures. The work of each section is completed in one year.

The lectures consist of notes and demonstrations combined with practical examples for the students to work under the lecturer's supervision.

The following syllabus is to be considered as a whole, and is to be regarded as an indication of the intended scope of the required study and consequently of the examinations, and not as a literal and ordered statement of the work to be done.

Section I. (*a*).

The definition and objects of bookkeeping. The different groups of accounts and their purposes. The principles of double-entry bookkeeping. The relation of the journal to the ledger. The purchases book, sales book, and cash book. The returns inward and returns outward books. The trial balance. The nature of errors disclosed and not disclosed in the trial balance. The rectification of errors. Banks and banking. The tabular cash book with discount, cash, and bank columns. Provision for bad and doubtful debts. The method of recording depreciation, goodwill, bad debts, interest, cash and trade discounts, and suspense items. The difference between capital receipts and expenditure, and revenue receipts and expenditure. Stock-taking procedure. The closing entries at balancing date and the preparation of Trading, and Profit and Loss Accounts, and Final Balance-sheet. The order and method of stating assets and liabilities in the Final Balance-sheet. Bills of Exchange and Promissory Notes. Method of keeping Bills Receivable and Bills Payable Books. Dishonoured and renewed bills. Retiring and discounting bills. Consignment and joint venture accounts.

Section I. (*b*).

Practical operations of a more difficult nature involving consignments, contract accounts, and joint ventures. Preparation of

final accounts from single-entry records; general trading and manufacturing accounts, including elementary costing and percentage calculations; procedure incidental to the formation, maintenance, and winding-up of a partnership and a joint-stock company, and the recording of operations in respect thereto, embracing realisation and liquidation accounts; principles and practice of self-balancing ledgers; depreciations; reserves and reserve funds; receipts and payments, and income and expenditure accounts.

Note.—Generally, the work to be covered, under Section I. (*a*) and (*b*), embraces the method of keeping the acounts of a retail and wholesale merchant, a partnership, a general manufacturer, and a joint-stock company. The work in Section I. in respect of joint-stock companies will be of an elementary nature.

Section II.

Fuller treatment of the subject-matter of Section I. (*b*), and in addition, Statement of Affairs and Deficiency Accounts; Executorship Accounts; Company Accounts, including Increase and Reduction of Capital; Reconstructions, Absorptions, and Amalgamations; Departmental and Branch Accounts; Double Account System; Percentage Statements; Costing and Cost Accounts; Hire-purchase Accounts; Royalties and Short Workings; Sinking Funds; Insurance Accounts.

Books prescribed.

Arthur Fieldhouse: Student's Complete Bookkeeping.

R. W. Carter: Advanced Accounts (Australian Edition).

A. E. Barton: Australian Advanced Accountancy.

GROUP B.

English I. (*See* Course IV.)
English II. (*See* Course IV.)
French I. (*See* Course V.)
French II. (*See* Course V.)
German I. (*See* Course VI.)
German II. (*See* Course VI.)
Philosophy I. (*See* Course X.)
Philosophy II. (*See* Course X.)
Philosophy IIA. (*See* Course X.)

GROUP C.

XXXVI.—AUDITING.

The Course consists of approximately 20 lectures, each of thirty minutes' duration, and is completed in one year.

Candidates must, except in special circumstances, satisfy requirements in the subject-matter of Accountancy Section I. before proceeding with the study of Auditing.

The lectures will deal with the principles and practice of Auditing—Nature and Objects—Qualifications and Rights of

Auditors, and their Powers, Duties, and Responsibilities. Valuation and Verification of Assets—Special points in the audit of Company Accounts and the Accounts of Partnerships—Investigations.

Books prescribed.

De Paula: The Principles and Practice of Auditing.

Spicer and Pegler: Practical Auditing.

XXXVII.—COMMERCIAL AND INDUSTRIAL ORGANIZATION.

The Course of lectures in Commercial and Industrial Organization is divided into two parts. The first part deals with Business Practice and Procedure, and the second part with Organization and Management.

Candidates must, except in special circumstances, satisfy requirements in the subject-matter of the First Part, before proceeding with the study of the Second Part of the Course.

The complete Course consists of approximately 40 lectures, each of one hour's duration, and the Course is completed in one year.

The following syllabus may be regarded as an indication of the intended scope of the course.

Part I.—Business Practice.

Conditions governing the purchase and sale of goods. Forms and documents used in connection with purchases and sales. Banks and their functions. Cheques. Bills of Exchange. Promissory Notes. Forms and documents used in connection with the receipt and payment of money. Commercial relations between persons. Sole Traders. Partnerships. Companies.

Part II.—Organization and Management.

General review of requirements and main features to be introduced when planning an ideal organization.

Detailed review of the principles and basic factors essential to efficient management and control, including—

The nature and constitution of Business Houses. The financing of a new business. The organization of control and responsibility. The organization of credit—Cash and credit trading—Machinery of payment. The remuneration of employees and workmen. Co-operation and Profit-sharing.

Books prescribed.

Collins, McLaren, Maxwell and Fenton: Australian Business Principles.

Claude E. Brown: Pitman's New Course in Business Principles.

Book for reference and further reading.

Stephenson: The Principles and Practice of Commerce.

XXXVIII.—BANKRUPTCY LAW.

Mr. A. J. Mansfield and Mr. J. D. C. Story.

The Course consists of approximately 40 lectures, each of one hour's duration, and is completed in one year.

Candidates must, except in special circumstances, satisfy requirements in Accountancy Section I. before proceeding with the study of Bankruptcy Law.

The lectures will deal with the General Principles and Practice governing operations under the the Bankruptcy Act, 1924-1932, and the Rules and Regulations thereunder, with special reference to persons subject to the Act—Debts provable—Modes of Sequestration and procedure—Management, Collection and Distribution of assets—Duties and Powers of Trustees—Discharge of Bankrupt—Compositions—Deeds of Assignment—Schemes of Arrangement.

Book prescribed.

McDonald, Henry and Meek: Australian Bankruptcy Law and Practice.

Books for reference and further reading.

Robertson and Tait: Federal Bankruptcy Law and Practice.

Lewis: Bankruptcy Law.

XXXIX.—COMPANY LAW.

Mr. A. J. Mansfield and Mr. J. D. C. Story.

The Course consists of approximately 40 lectures, each of one hours' duration, and is completed in one year.

Candidates must, except in special circumstances, satisfy requirements in Accountancy Section I. before proceeding with the study of Company Law.

The lectures will deal with the general principles and practice governing operations under "*The Companies Act of* 1931," "*The Life Assurance Companies Act of* 1901," and "*The Insurance Act of* 1916," with special reference to—Constitution—Registration and Incorporation—Management and Administration—Duties and Powers of Liquidators—Compulsory and Voluntary Winding-up.

Book prescribed.

Topham: Company Law—Student's Edition.

XL.—MERCANTILE LAW.

Mr. A. J. Mansfield.

The Course consists of 40 lectures, each of one hour's duration, and is completed in one year.

The lectures will deal with the following subject-matter:—

Negotiable Instruments.

Law of Contract; Principal and Agent; Law of Partnership; Bills of Sale; Liens; Registration of Firms; Hire-purchase Agreements; Insurance—Life, Fire, Marine; Workers' Compensation Act; Landlord and Tenant; Sale of Goods Act; Stamp Duties Act; Contracts of Affreightment; Law Relating to Common Carriers; Arbitration and Awards; Bailments.

Students should have access to and use the following books:—
Anson: Law of Contracts.
Rydge: Australian Steven's Mercantile Law.
Chalmers: Sale of Goods Act.
Russell and Edwards: Bills of Exchange Act.
Morley, Tait and Dalby: Australian Manual of Accountancy and Commercial Law.
Dean: Hire Purchase.

In addition, the following Statutes should be referred to:—
Partnership Act, 1891.
Sale of Goods Act, 1896.
Bills of Exchange Act, 1909.
Mercantile Acts, 1867 *to* 1896.
Bills of Sale Acts, 1891 *to* 1896.
Statute of Frauds and Limitations, 1867.
Auctioneers and Commission Agents Acts, 1922 *to* 1924.
Sea Carrioge of Goods Act, 1924.
Marine Insurance Act, 1909.
Merchant Shipping Acts, 1894 *to* 1916.
Summary Ejectment Act, 1867.
Money-lenders Act, 1916.
Contractors' and Workmen's Lien Acts, 1906 *to* 1921.
Factors Act, 1892.
Gaming Act, 1850.
Interdict Act, 1867.
Stamp Acts, 1894 *to* 1930.
Married Women's Property Acts, 1890 *to* 1897.
Secret Commissions Act, 1905.
Distress, Replevin, and Ejectment Act, 1867.
Registration of Firms Acts, 1902 *to* 1912.

XLI.—LAW OF TRUSTEES.

The Course consists of approximately 40 lectures, each of one hour's duration, and is completed in one year.

Candidates must, except in special circumstances, satisfy requirements in Accountancy Section I. before proceeding with the study of the Law of Trustees.

The lectures will deal with the following:—

Law relating to Wills and Trusts and to Grants of Probate and Letters of Administration—Distribution in Intestacy—Appointment, Retirement, Discharge, and Powers, Duties, Rights and Liabilities of Executors, Administrators, and Trustees—Appointment of Receivers—Powers under Public Curator Act, 1915, and Trustees and Executors Acts, 1897 to 1924; Guardianship and Custody of Infants.

The following Statutes should be referred to:—

Trustees and Executors Acts, 1897 *to* 1924.
Public Curator Acts, 1915 *to* 1926.
Trust Accounts Act, 1923.
Guardianship and Custody of Infants Act, 1891 *to* 1928.
Queensland Trustees Limited Acts, 1888 *to* 1932.
Union Trustee Company of Australia Limited Acts, 1890 *to* 1930.
Testator's Family Maintenance Act, 1914.
Intestacy Act, 1877.
Succession Acts, 1867 *to* 1895.
Probate Act, 1867.
Common Law Probate Act, 1857.
Settled Land Act, 1886.

XLII.—TAXATION LAW AND PRACTICE.

Mr. C. G. McCorkell.

The Course consists of approximately 40 lectures, each of two hours' duration, and is completed in one year.

Candidates must, except in special circumstances, satisfy requirements in Accountancy Section I. before proceeding with the study of Taxation Law and Practice.

The lectures consist of notes and demonstrations combined with practical examples for the students to work under the lecturer's supervision.

The lectures will deal with the following:—

The Powers of the State and the Commonwealth Governments with regard to Taxation. The Basic Principles of the Income Tax Acts. The Construction of the Income Tax Acts. Liability to Income Taxation. Rates of Income Taxation. Returns and Assessments. Objections and Appeals. The Collection of Income Tax. Appeal Provisions and Legal Proceedings as laid down by the Income Tax Acts. Miscellaneous Provisions of the Income Tax Acts. Income Tax Cases.

Statutes—

The Income Tax Acts (Queensland), 1924 *to* 1932, *and any Amendments thereof.*
The Income Tax Assessment Acts (Commonwealth of Australia), 1922-1932, *and any Amendments thereof.*
The Income Tax Acts (Commonwealth of Australia).
The Regulations under the above Acts.

GROUP D.

Public International Law. (*See* Course XVI.)

Constitutional History and Political Science I. (*See* Course VIII.)

Modern Political Institutions and Theory. (*See* Course VIII.)
Pure Mathematics I. (*See* Course XII.)
Pure Mathematics II. (*See* Course XII.)
Statistical and Actuarial Mathematics. (*See* Course XIV.)

GROUP E.

Chemistry I. (*See* Course XXI.)
Chemistry II. (*See* Course XXI.)
Physics I. (*See* Course XXIII.)
Physics II. (*See* Course XXIII.)
Biology I. (*See* Courses XIX. and XX.)
Geology I. (*See* Course XXII.)

AGRICULTURE—PART I.; PART II.

Principles of Agriculture I. (*See* Course XLVIII.)
Principles of Agriculture II. (*See* Course LIII.)
Principles of Fruit Culture. (*See* Course LVII.)
Agricultural Botany. (*See* Course L.)
Zootechny. (*See* Course LI.)

Agriculture may not be taken until a pass has been obtained in Biology I.

Faculty of Agriculture—Degree of B.Sc. Agr.

FIRST YEAR.

BIOLOGY I.

As for Science Students. (*See* Courses XIX. and XX.)

CHEMISTRY I.

As for Science Students. (*See* Course XXI.)

GEOLOGY AND MINERALOGY I.

As for Science Students. (*See* Course XXII.)

PHYSICS I.

As for Science Students. (*See* Course XXIII.)

XLIII. TECHNICAL DRAWING.

Mr. Munro.

Construction of scales, regular and irregular polygons, methods of constructing ellipses, cycloidal curves and involutes. Practical application of these curves. Helices and their applications—*e.g.*, screws, springs, bolts, &c.

Orthographic Projection—

(*a*) Primary planes, dihedral angles, projection of plane elevation and end view.

(*b*) Inclined planes and projection of inclined surfaces on to the horizontal and vertical planes.

(*c*) Oblique planes and problems relating thereto—*e.g.*, determining traces, angles, and true areas. Projection of oblique surfaces on to the horizontal and vertical planes.

(*d*) Dimensioned drawings of machine details, &c.

Development of surfaces of geometrical solids.

Conic sections and interpenetration of cylinders, cones, &c., with practical applications in development, such as the shape of sheets required for troughs, milk cans, &c.

Isometric Projection.—Principles and method of making drawings of outlines of buildings and engineering details.

Oblique Parallel Projection.—Principles and method of making drawings of outlines of buildings and engineering details.

Perspective Drawing.—Principles and method of making drawings of outlines of buildings and engineering details.

Handsketching in Orthographic, Isometric, Oblique Parallel and Perspective of engineering fastenings and simple machine parts.

Text-book.

Duncan: Introduction to Engineering Drawing.

PURE MATHEMATICS I.

As prescribed for Science Students selecting Group (*a*). (*See* Calendar, Part I., p. 56.)

Vacation Work.

Students who have completed their first year within the Faculty of Agriculture shall undertake training in Practical Agriculture at the Queensland Agricultural High School and College during the Long Vacation, except in the case of those students who have already obtained the Diploma of the College. The Diploma-holders will be required to spend the Long Vacation on farms approved by the Faculty.

SECOND YEAR.

XLIV. ECONOMIC ENTOMOLOGY.

Mr. Perkins.

A course comprising:—

First Term.—Twenty lectures on the External and Internal Anatomy, Physiology, and Development and Metamorphosis of Insects.

Second Term.—Twenty lectures on the Classification, Geographical Distribution, and Habits of the Insecta, with special reference to Bionomics and control of species of economic importance in Australia.

Third Term.—Twenty lectures on the Principles of Insect Control. Practical classes are devoted to the study of Internal and External Anatomy, and Classification of Insects, species of economic importance being used as types wherever possible.

Each student is expected to work out the life-cycle of at least three species of economic importance.

A general collection of at least 300 classified species is to be handed in at the end of the year.

Text-books.

Tillyard: Insects of Australia.

Comstock: Introduction to Entomology.

Wardle: Problems of Applied Entomology.

Martin: The Principles of Scientific Plant Protection.

Imms: Text-book of Entomology.

XLV. AGRICULTURAL CHEMISTRY I.

Mr. Hines.

A course involving two Lectures and six hours' practical work per week during the three terms.

Lectures.—Thirty lectures on Organic Chemistry with special reference to naturally occurring substances.

Thirty lectures on Physical Chemistry dealing with the gas laws, theory of solutions, law of mass action, buffer action, galvanic cells and pH measurement, adsorption and the colloid state, reaction velocity, catalysis and enzyme action.

Practical Work: Elementary quantitative analysis, physico-chemical measurements, and experimental organic chemistry.

Text-books.

Lowry and Sugden: Class-book of Physical Chemistry.

Read: Text-book of Organic Chemistry, or

Kipping and Kipping: Organic Chemistry.

XLVI. AGRICULTURAL GEOLOGY.

Dr. Bryan.

Lectures: A course of sixty Lectures on Crystallography, Mineralogy, Petrology, Rock-Weathering, Ground Water, Soils and Soil Surveys, Natural Mineral Fertilisers.

Laboratory Practice: At least four hours per week in the study of Crystals, Minerals, Rocks, and Soils, both microscopically and megascopically.

Field Work: As prescribed.

BOTANY II.

Professor Goddard, Mr. Cayzer, and Dr. Herbert.

Selected portions of Botany II. as prescribed for Science Students, involving two Lectures and six hours' practical work per week. (*See* Course XXI.)

Vacation Work.

Students who have completed the second or the third year within the Faculty of Agriculture will be required to devote one Long Vacation to specialised work and one Long Vacation to work on an approved farm, it being understood that as far as practicable the specialised work will be combined with practical work on the farm or farms selected.

XLVII. PLANT PATHOLOGY.

Dr. Herbert.

A course of sixty Lectures and 120 hours' practical work during the three terms. Physiological diseases; virus diseases; nematodes; cryptogamic and phanærogamic parasites. Ecology and control of plant disease. Practical work includes laboratory and field examination of the diseases of weeds and of native and cultivated plants.

Text-book.

Heald: A Manual of Plant Diseases.

THIRD YEAR.

(*At Queensland Agricultural College.*)

XLVIII. PRINCIPLES OF AGRICULTURE I.

Professor Murray.

Sixty Lectures.

Land and Soils.

Land.—Queensland methods of land settlement for agricultural and pastoral purposes.

Statistics of Australian and Queensland Agricultural crops and pastoral industries. (*See also* Agricultural Economics.)

Factors determining the value of land for agricultural and pastoral purposes.

Rainfall.—Summer incidence. High rate of evaporation from Queensland soils. Comparison of North European and the Australian winter rainfall zone with Queensland conditions. Conservation of soil moisture; fallowing in districts of low rainfalls.

Soils.—Suitability for crops. (*See also* Agricultural Geology, Chemistry, and Bacteriology.)

Fertility of Soils.—Plant food materials; availability, deficiencies. Substances injurious to plants.

Manures and Fertilisers.—Phosphoric, potassic, and nitrogenous; liming; soil micro-organisms. (*See also* Agricultural Bacteriology.)

Cultivation, Planting, and Harvesting.—Implements; their use, area covered, and power required. Horses and tractors as motive power.

Drainage.—General principles; restricted application in Australian agriculture; irrigation practice.

Irrigation.—General principles and methods. The Dawson Valley and Burdekin schemes; small unit plants; irrigation schemes in other countries and States. (*See also* Horticulture Notes.)

Visits to the Queensland Agricultural College and to places of special interest in connection with the course will be made during the year.

References.—Queensland Crown Land Directory and publications of the Lands Department.

Annual Report of the Department of Agriculture and Stock.

Annual Report of the Prickly-pear Commission.

Reference Books.

Hall: The Soil.
Hilgard: Soils.
Widstoe: Dry Farming.
King: Irrigation and Drainage.
The Queensland Agricultural Journal.

XLIX. GENETICS AND PLANT BREEDING.

Mr. W. W. Bryan.

A course consisting of thirty Lectures and twenty two-hour demonstrations on the principles of Genetics and Plant Breeding, including such subjects as relationship of Genetics to other biological sciences; work of Mendel, Mendel's laws, Mendelian terms; inheritance in monohybrids, dihybrids, trihybrids, etc.; early plant hybridisers; physical basis of heredity, various theories; interaction of factors; reversion; sex inheritance and sex determination; linkage; chromosome maps; calculations; quantitative inheritance and multiple factors; pure-line theory; inbreeding and outbreeding; non-Mendelian inheritance; mutations and the mutation theory; evolution; eugenics.

Plant improvement with reference to development of the organism; heredity and environment; variation; composition of plant populations; introduction; mass selection and pedigree selection; hybridisation followed by selection; technique of hybridisation; bud selection; clonal lines; plans; records and notes; details of methods of improvement for different types of plants.

A short course in biometrics, plot technique and experimental error.

Demonstrations will consist of work illustrating the matter dealt with in lectures.

Text-books.

Hayes and Garber: Breeding Crop Plants.

Babcock and Clausen: Genetics in relation to Agriculture.

L. AGRICULTURAL BOTANY.

Mr. W. W. Bryan.

A course consisting of thirty Lectures and fifteen two-hour demonstrations, illustrated by specimens, diagrams, and slides on:—

Seeds and seed testing.

The Botany of crop plants of the Gramineæ, Bromeliaceæ, Liliaceæ, Musaceæ, Cannaceæ, Rubiaceæ, Anonaceæ, Saxifragaceæ, Rosaceæ, Linaceæ, Leguminosæ, Rutaceæ, Euphorbiaceæ, Vitaceæ, Malvaceæ, Anacardiaceæ, Passifloraceæ, Caricaceæ, Umbelliferæ, Oleaceæ, Convolvulaceæ, Solanaceæ, Cucurbitaceæ, Compositæ.

Grasses and fodder plants—identification and value; pasture work.

Poison plants and stock-killing plants—identification; effects; methods of control.

Weeds—identification, control, and classification.

Demonstrations will consist of work illustrating the matter dealt with in the lectures.

Students will be required to make a collection of grasses, fodder plants, weeds, and detrimental plants, classify and write notes on the economic importance of each.

Text-book.

Robbins: Botany of Crop Plants.

LI. ZOOTECHNY.

Mr. McKenzie.

Theory and Practice.

Breeds of sheep, cattle, pigs. and horses. Principles of horse-shoeing. The management and care of farm animals. The feeding of farm animals.

LII. AILMENTS OF LIVE STOCK.

Mr. McKenzie.

Theory and Practice.

Anatomy and physiology of farm animals. Common diseases of farm animals; the prevention and treatment of diseases.

Vacation Work.

Students who have completed the second or the third year within the Faculty of Agriculture will be required to devote one Long Vacation to specialised work and one Long Vacation to work on an approved farm, it being understood that, as far as practicable, the specialised work will be combined with practical work on the farm or farms selected.

LIII. PRINCIPLES OF AGRICULTURE II.

Professor Murray.

Crops—Growth and harvesting of Queensland crops. Possibilities of extension of present crop areas; local development of crops, the products of which are now largely imported.

Pastures.—Native, temporary, and permanent pastures. The Hohenheimer and other systems of pasture management; cultivation; top dressing; stocking; drainage.

Establishment of permanent pastures. See also Agricultural Botany notes.

Droughts and Seasonal Shortages.—General measures for a reasonable safeguarding of the State against drought losses. Conservation of fodder and grains; ensilage.

Methods to be employed in agricultural and pastoral field experiments.

LIV.—DAIRYING.

Mr. R. R. Keats.

Production: See Zootechny.

DAIRY MANUFACTURES.

Cream Grading and Buttermaking.

The grading of cream. Common faults of cream, their causes and prevention.

Neutralisation of cream, pasteurisation of cream, starters. Buttermaking: Control of moisture, butter boxes, common faults of butter, butter grading, scoring, and judging, the Dairy Produce Act, the Commerce Act.

Text-book.

O. F. Hunziker: The Butter Industry.

Cheesemaking.

Milk for cheesemaking, starters, colouring, rennet, the principles of cheesemaking, control of fermentation, cutting, cooking, pitching, wheying off, cheddaring, and milling of curd; salting, hooping, and pressing; ripening and storing, estimating the yield, the manufacture of Cheddar cheese from pasteurised milk, the composition of Cheddar cheese, defects in cheese, judging and grading, other types of cheese.

Text-book.

Van Slyke: Science and Practice of Cheesemaking.

Dairy Technology.

Condensed milk, sweetened and unsweetened. Manufacture.

Faults of sweetened and unsweetened condensed milk.

Plain condensed bulk milk and concentrated milk.

Milk powder—Merrell-Soule, Campbell, Buflovak, Eckenberg, and Just-Hatmaker processes. Dried buttermilk.

Malted milk.

Ice-cream. Manufacture.

LV. AGRICULTURAL BACTERIOLOGY.

Professor Murray.

Micro-organisms.

Soil Microbiology.

Micro-organisms in water; septic tanks; farm hygiene.

Micro-organisms in their relationship to bread-making.

Micro-organisms in their relationship to milk.

Normal changes in milk and cream; abnormal fermentations; market milks; milk as a carrier of disease organisms; bacteriological milk standards.

Bacteria, yeasts and moulds in their relationship to butter, cheese, ice-cream, sweetened and unsweetened condensed milk, evaporated and powdered milks.

Preservation of human and animal foods; microbial food-poisoning.

Manufacture of industrial alcohol, spirits, wines, beers, vinegar, citric acid, and leather.

Vaccines and anti-sera.

Text-book.

Marshall: Microbiology.

The following books may be used for reference.

Greaves: Bacteria and Soil Fertility.
Russell: The Micro-organisms of the Soil.
Orla-Jensen: Dairy Bacteriology.
Hammer: Dairy Bacteriology.
Biological Abstracts.

LVI. FARM BOOK-KEEPING.

Mr. Woodward.

General book-keeping methods.
Methods of keeping farm and station accounts.
Farm costing systems.

LVII. PRINCIPLES OF FRUIT CULTURE.

Mr. Howie.

Selection of land for horticultural purposes.
Orchard, vineyard, and garden soils.
Laying out and planting of orchards and gardens.
Selection of varieties; development of varieties.

Propagation of plants; seeds, seedlings, cuttings, propagation from leaves and roots, budding, grafting.

Pruning; objects; methods.

Use of manures and fertilisers in the orchard and garden.

Vegetable and flower gardens.

Irrigation in horticulture.

LVIII. AGRICULTURAL ENGINEERING.

Mr. Barrett.

Farm Roads.—Construction and maintenance.

Pumps.—Single and double action; centrifugal; capacity, maintenance and uses of each type in agriculture and dairying.

Windmills.—Capacity and maintenance.

Steam Boilers and Engines.—Operation and uses in agriculture and dairying.

Internal Combustion Engines.—Four-stroke cycle; two-stroke cycle; crude oil engines; suction gas operation.

Tractors.—Essential features for successful operation under farming conditions; capacity of different ratings and types; timing of ignition; timing of valves; adjusting of bearings; fuels and lubrication; dynamometer tests with farm machinery; general care and maintenance.

Refrigeration.—General principles; the ammonia system in detail; care and management of refrigerating machinery; operation of College plant; capacity of plants.

Care and management of small electrical units.

Practical work with College boilers, steam engines, stationary internal combustion engines and tractors.

FOURTH YEAR.

LIX. AGRICULTURAL ECONOMICS I.

Professor Alcock.

(Agricultural Economics II. is not at present offered.)

A course in two sections of about thirty Lectures each: (i.) Theory (a special course), and (ii.) Economic Geography (as for Commerce, see IX.).

The Examination includes written answers to Examination questions and the presentation of satisfactory note-books, maps, graphs, diagrams, &c., as required from time to time.

Text-books.

For section (i.).—George O'Brien: Agricultural Economics.

For section (ii.).—The latest Commonwealth Year-book.
Chisholm: Commercial Geography; *or*
Huntington and Cushing: Modern Business Geography.
Taylor: Australia, Physiographic and Economic.

(*Selected portions of reference-books provided in the Library will be prescribed.*)

LX. AGRICULTURAL CHEMISTRY II.

Mr. Hines.

A Course involving two Lectures and six hours' practical work per week during the three terms.

Lectures.—The elements of animal and plant biochemistry and the science of nutrition. The study of soils and of the chemistry of crop production.

Practical Work.—Laboratory exercises on soils, milk and dairy produce, feeding stuffs, insecticides and fungicides, fertilizers and manures. The nature of the work can be adjusted to suit the needs of individual students and of the subjects selected by them for special study. Students are expected to make full use of the departmental library and to become familiar with the more important periodical literature therein.

LXI. BOTANY III.

Mr. Cayzer and Dr. Herbert.

Selected portions of Botany III. as prescribed for Science Students, involving three Lectures and eight hours' practical work per week during First and Second Terms. (*See* Course XXI.)

LXII. METEOROLOGY.

Mr. Rimmer.

A course of about thirty Lectures on Meteorology with special reference to Agriculture, as follows:—

PART I.

Two Lectures per week during the First Term.

The Physics of the Atmosphere, and elementary principles of Dynamical Meteorology, with a study of the variation and distribution of the meteorological elements—insolation, temperature, pressure, water-vapour, etc., and the laws governing the general circulation of the atmosphere, leading up to (*a*) Weather and Weather-sequence, with particular reference to Australian Weather; and (*b*) a general classification of climates based on the above distribution.

Special consideration will be given to problems of soil-temperatures, humidity, evaporation, etc., in relation to plant-life.

Text-books.

Hunt: Climate and Weather.
Taylor: Australian Meteorology.
Brunt: Meteorology.

PART II.

One Lecture per week during the Second and Third Terms.

(*a*) Comparative Climatology with special reference to semi-arid and sub-tropical climates similar to Australian types.

(*b*) Weather and Crops. Climate Limits. Bio-climatic Laws. Influence of weather on growth and yield, as determined by correlation coefficients.

Text-book.

Kendrew: The Climates of the Continents.

LXIII. PRINCIPLES OF AGRICULTURE III.

Professor Murray.

(During First Term.)

Farm Costing.—Costs of farm operations; costs of production. Methods of increasing efficiency in agricultural and pastoral industries.

Agricultural Education.—Research, education, and extension activities in Agriculture.

LXIV. VETERINARY PARASITOLOGY.

Professor Goddard and Mr. Perkins.

A course of Lectures and demonstrations, involving three hours per week during the First and Second Terms.

Parasites and parasitism; classification of internal and external parasites; relation of parasitism to symbiosis; origin of parasitism.

Protozoan parasites affecting domestic animals and man. Metazoan parasites. A systematic account of the anatomy and the life history of the flatworms (Trematoda and Cestoda), the round worms (Nematoda and Acanthocephala), and the Arthropod parasites (ticks, mites, flies, &c.); their pathological effects on the domesticated animals.

Text-book.

Underhill: Parasites and Parasitosis of Domestic Animals.

SPECIAL SUBJECT.

During the Fourth Year part of the time of the Student will be devoted to a Special Subject selected by the individual Student and approved by the Faculty, such as Entomology, Plant Pathology, Agricultural Chemistry, Agricultural Bacteriology, Plant Breeding, Agriculture, &c.

ACADEMIC DRESS.

The following amendments, which will become effective as from the 1st January, 1934, have been made in the Rules relating to Academic Dress, as printed in the University Calendar 1932-1936, Part I., pages 112, 113, 114.

Bachelor of Arts—

Hood: Black stuff Oxford or Cambridge B.A. pattern lined with strip three inches wide of pure white silk edged with white silk cord.

Master of Arts—

Hood: As for B.A., lined with strip three inches wide of dark maroon silk.

Bachelor of Science—

Hood: As for B.A., lined with strip three inches wide of blue silk edged with yellow silk cord.

Bachelor of Science in Agriculture—

Hood: As for B.A., lined with strip three inches wide of dark green silk edged with harvest gold silk cord.

Master of Science—

Hood: As for B.Sc., lined with strip three inches wide of yellow silk.

Doctor of Science—

Hood: Red silk or stuff lined with yellow silk.

Bachelor of Engineering—

Hood: As for B.A., lined with strip of light maroon silk three inches wide edged with black silk cord.

Master of Engineering—

Hood: As for B.E., lined with strip of yellow silk three inches wide edged with black silk cord.

Bachelor of Commerce—

Hood: As for B.A., with substitution of gold silk for white silk cord.

Bachelor of Law—

Hood: As for B.A., lined with strip of light blue silk edged with black silk cord.

Doctor of Law—

Hood: Red stuff lined with dark blue silk.

Bachelor of Medicine—

Hood: Similar to B.A., lined with strip of black silk edged with red silk cord.

Doctor of Medicine—

Hood: Red silk lined with black silk.

TIME TABLES.

FACULTIES OF ARTS AND COMMERCE—TIME TABLE OF LECTURES, 1934.

Day.	9 to 10.	10 to 11.	11 to 12.	12 to 1.	5 to 6.	6 to 7.	7 to 8.	8 to 9.
	DAY.				* EVENING. [N.B. –Subject to (*a*) rearrangement and (*b*) sufficient enrolment.]			
Monday	Pure Math. I. (A and B). Greek II.	Greek I. App. Math. II. French II. Const. Hist. I.	English I. Polit. Sci. II.	Greek Literature and Art German I.	Roman Law Polit. Sci. II. Economics I. (History).	Roman Law Const. Hist. II. Taxation Law and Practice.	Accountancy I. Accountancy II Auditing.	Accountancy I. Accountancy II Auditing.
Tuesday	App. Math. I. French I. Latin II.	Brit. Hist. I. (Ordinary). Pure Math. II. Philosophy IIA. (Ethics). Jurisprudence.	Latin I. English II. Const. Hist. II.	Philosophy I. Brit. Hist. II. (Modern). German II. Pub. Int. Law.	English I. Economics IIA. Pure Math. II. Economics I. (Theory).	English I. Economics IIA.	Pure Math. I. Education C. and I. Organisation. Trustees' Law.	App. Math. I. Education Mercantile Law
Wednesday	Pure Math. I. (A). Latin II.	English I. Philosophy II. (Psychology). Latin II.	Brit. Hist. I. (Modern). Greek I. French II.	Philosophy IIA. (Metaphysics). German I.	Brit. Hist. I. (Modern).	Brit. Hist. I. (Ordinary). French I.	Philosophy I. PhilosophyIIA. French I.	Philosophy I. Philosophy IIA.
Thursday	App. Math. I. French I. Polit. Sci. I. Latin II.	Latin I. Pure Math. II. Brit. Hist. II. (Ordinary).	Philosophy I. English II. Greek Literature and Art	English I. Philosophy II. (Logic).	Latin I. Brit. Hist. II. (Modern). Pure Math. II. Const. Law	Latin I. Brit. Hist. II. (Ordinary). Music. (Counterpoint). Taxation Law and Practice.	Pure Math. I. Economics II. Bankruptcy Law.	App. Math. I. Economics II. Company Law.
Friday	Pure Math. I. (A and B). Greek II.	Greek I. App. Math. II. Jurisprudence.	English II. Latin I.	German II. Pub. Int. Law.	Economics I. (Geography).	Music. (History of Music).	Music. (Harmony).	

Statistical and Actuarial Mathematics, and Statistics and Statistical Method, are given, subject to sufficient enrolment, at times to be arranged.

For Science subjects see Time Tables, Faculty of Science.

Commerce Subject—Modern History appears above as British History I. (Modern) and British History II. (Modern).

Science Subjects—The first-year Science Subjects for 1934 are Chemistry I. and Geology I.

FACULTY OF SCIENCE.—TIME TABLE, 1934.

9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 3.	3 to 4.	4 to 5.
MONDAY—						
Pure Maths. I. Chem. II. Chem. III. A Chem. III. B	Physics I. App. Maths. II. *Geology II.* *Chem. III. B* *Geology III.*	Biology I. *Geology II.* *Chem. III. B* *Geology III.*	Chem. I. Physics III. Geology II. *Chem. III. B* *Geology III.*	Botany III. Zoology III. *Physics I. B* *Chem. I. A* *Chem. II.* *Physics III.*	*Botany III.* *Zoology III.* *Physics I. B* *Chem. I. A* *Chem. II.* *Physics III.*	*Botany III.* *Zoology III.* *Physics I. B* *Chem. II.* *Physics III.*
TUESDAY—						
App. Maths. I. Botany II. Physics II. Botany III. Zoology III. Chem. III. A *Zoology II.*	Geology I. Pure Maths. II. *Chem. I. B* *Geology III.* *Physics III.*	*Geology I.* *Geology II.* *Chem. I. B* *Geology III.* *Physics III.*	*Geology I.* *Geology II.* Chem. III. B *Geology III.* *Physics III.*	Zoology II. *Biology I.* *Botany II.* *Physics II.* *Chem. III. A* *Chem. III. B*	*Zoology II.* *Biology I.* *Botany II.* *Physics II.* *Chem. III. A* *Chem. III. B*	*Zoology II.* Biology I. *Botany II.* *Physics II.* *Chem. III. A* *Chem. III. B*
WEDNESDAY—						
Pure Maths. I. (Optional) Geology I. Chem. II. Geology III.	Physics I. *Chem. II.* *Geology III*	Biology I. *Chem. II.* *Geology III.*	Chem. I. Botany II. Zoology II. Physics III. *Geology III.*			

FACULTY OF SCIENCE—*continued.*

9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 3.	3 to 4.	4 to 5.
THURSDAY—						
App. Maths. I. Physics II. Chem. III. A Chem. III. B	Geology I. Pure Maths. II. Geology III. *Chem. III. B* *Physics III.*	*Chem. I. A* *Geology II.* *Chem. III. B* *Physics III.*	*Chem. I. A* Geology II. Botany III. Zoology III. *Physics III.*	Botany II. Zoology II. *Biology I.* *Physics II.* *Botany III.* *Zoology III.* *Chem. III. A*	*Botany II.* *Zoology II.* *Biology I.* *Physics II.* *Botany III.* *Zoology III.* *Chem. III. A*	*Botany II.* *Zoology II.* *Physics II.* *Botany III.* *Zoology III.* *Chem. III. A*
FRIDAY—						
Pure Maths. I. Chem. II. Geology III. Chem. III. B	Physics I. App. Maths. II. *Geology II.* *Chem. III. A* *Chem. III. B*	Physics II. *Geology I.* *Geology II.* *Chem. III. A* *Chem. III. B*	Chem. I. Physics III. Geology II. *Chem. III. A* *Chem. III. B*	*Physics I. A* *Chem. I. B* *Chem. II.* (2nd and 3rd terms) *Botany II.* (1st term) *Zoology II.* (1st term) *Zoology III.* *Botany III.*	*Physics I. A* *Chem. I. B* *Chem. II.* (2nd and 3rd terms) *Botany II.* (1st term) *Zoology II.* (1st term) *Zoology III.* *Botany III.*	*Physics I. A* *Chem. II.* (2nd and 3rd terms) *Botany III.*
SATURDAY—						
Botany II. (9 to 11) *Chem. II.* (9 to 12): (1st term) *Zoology II.* (9 to 11): 2nd and 3rd terms)						

Note.—Practical work periods are indicated by italics. *Zoology II.*—Extra hour to be arranged. *Zoology III.*—Extra two hours to be arranged.

PERMANENT EVENING TIME TABLE.

FACULTY OF SCIENCE.

Subject to the conditions that an Evening Class may not be formed in any Part I. subject in which there is not an enrolment of at least four students, or in any Part II. subject in which there is not an enrolment of at least two students, the following Evening Time-Table will be observed by the Faculty of Science until otherwise determined :—

(*a*) FOR 1934, AND EVERY ALTERNATE YEAR THEREAFTER.

Day.	5 to 6.	7 to 8.	8 to 9.	9 to 10.
Monday	Chemistry I. Pure Math. II.	*Chemistry I.*	*Chemistry I.*	
Tuesday	Geology I. Physics II.	Pure Math. I.	App. Math. I. *Geology I.*	*Geology I.*
Wednesday ..	Chemistry I. Physics II.	Geology I. *Physics II.*	*Geology I.* *Physics II.*	*Geology I.* *Physics II.*
Thursday	Geology I. Physics II.	Pure Math. I.	App. Math. I.	
Friday	Chemistry I. Pure Math. II.			
Saturday— 9 to 11 .. 9 to 12 ..	*Chemistry I.* *Physics II.*			

(*b*) FOR 1935, AND EVERY ALTERNATE YEAR THEREAFTER.

Day.	5 to 6.	7 to 8.	8 to 9.	9 to 10.
Monday	Physics I. Chemistry II.	*Chemistry II.*	*Chemistry II.*	*Chemistry II.*
Tuesday	Pure Math. II.	Pure Math. I.	App. Math. I.	
Wednesday ..	Physics I. Chemistry II.			
Thursday	Pure Math. II.	Pure Math. I.	App. Math. I.	
Friday	Physics I. Chemistry II.	*Chemistry II.*	*Chemistry II.*	*Chemistry II.*
Saturday (9 to 12)	*Physics I.* *Chemistry II.*			

Pure Mathematics III., Chemistry III., Physics III., Applied Mathematics II. Statistical and Actuarial Mathematics, Geology II.—Times to be arranged when necessary.

FACULTY OF ENGINEERING.—TIME TABLE, 1934.

N.B. Modifications for the separate terms are indicated in footnotes.

Day.	9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 5.
MONDAY—					
1st Year All	Pure Mathematics I.	Physics I.	Design I.	Chemistry I.	Chemistry I.
2nd Year All	Chemistry II.	Applied Mathematics II.	*Applied Mechanics*	*Applied Mechanics*	*Heat Engines II.*
3rd Year Civil	*Design III.*	*Design III.*	*Design III.*	Hydraulics I.	*Hydraulics or Materials Testing*
3rd Year Mechanical and Electrical		Heat Engines III.	Electrical Engineering II.		
3rd Year Chemical ..	Chemistry II.	*Design III.*	*Design III.*		
4th Year Civil	Specialist's Lecture	*Design IV.*	Seminar.	Seminar.	*Design IV.*
4th Year Mechanical and Electrical		*Electrical or Design IV.*	*Electrical or Design IV.*	*Electrical or Design IV.*	*Electrical or Design IV.*
4th Year Chemical ..		Heat Engines III. (14)	*Chemistry*	*Chemistry*	*Chemistry*
TUESDAY—					
1st Year All	Applied Mathematics I.	Geology I.	*Geology I.*	*Geology I.*	*Engineering Drawing I.*
2nd Year All	Physics II.	Pure Mathematics II.	Heat Engines II.	..	*Design II.* (7)
3rd Year Civil	Civil Engineering I.	Electrical Engineering I.	Mathematics III. (13)	*Journals*	
3rd Year Mechanical and Electrical			..		*Engineering Chemistry* (9)
3rd Year Chemical ..		*Design III.*	*Design III.*		*Chemistry*
4th Year Civil	Special Lecture	..	Seminar		*Design IV.*
4th Year Mechanical and Electrical	*Design IV.*	*Electrical or Design IV.*		Seminar	*Electrical or Design IV.*
4th Year Chemical ..	Chemistry	Electrical Engineering I.			*Chemistry*

FACULTY OF ENGINEERING—*continued.*

Day.	9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 5.
WEDNESDAY—					
1st Year All	Geology I.	Physics I.	Technical Drawing (10)	Chemistry I.	
2nd Year All	*Design II.*	*Design II.*	*Design II.*	Applied Mechanics	
3rd Year Civil	*Design III.*	*Design III.*	*Design III.*	Civil Engineering I. (4)	
3rd Year Mechanical and Electrical					
3rd Year Chemical ..	Chemistry II.				
4th Year Civil	*Design IV.*	*Design IV.*	*Design IV*	*Design IV.*	
4th Year Mechanical and Electrical	..	Electrical III.	Seminar	Seminar	
4th Year Chemical ..	*Design IV.*	*Design IV.*	*Design IV.*	*Design IV.*	1 to 2 Building and Construction Architecture (15)
THURSDAY—					
1st Year All	Applied Mathematics I.	Geology I.	*Chemistry I.*	*Chemistry I.*	*Technical Drawing*
2nd Year All	Physics II.	Pure Mathematics II.	Heat Engines II. (11)	..	*Physics II.*
3rd Year Civil	Surveying I.	*Surveying I.*	*Surveying I.*	*Surveying I.*	*Surveying I.*
3rd Year Mechanical and Electrical	Surveying I. (9)	Heat Engines III.	*Design III.*	*Design III.*	*Surveying I.* (9)
3rd Year Chemical ..	Surveying I. (12)	*Chemistry*	*Chemistry*	*Chemistry*	*Surveying I.* (12)
4th Year Civil	*Surveying II.*	Surveying II.	*Surveying II.*	*Surveying II.*	*Surveyeng II.*
4th Year Mechanical and Electrical	*Heat Engines or Design IV.*	*Heat Engines or Design IV.*	*Heat Engines or Design IV.*	*Electrical III.* (16)	*Heat Engines or Design IV.*
4th Year Chemical ..	Chemistry	Heat Engines III.	..	Economic Geology	*Chemistry*

FACULTY OF ENGINEERING—*continued.*

Day.	9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 5.
FRIDAY—					
1st Year All	Pure Mathematics I.	Physics I.	*Geology I.*	Chemistry I.	*Physics I.*
2nd Year All	Chemistry II.	Applied Mathematics II.	..	Applied Mechanics (11)	*Design II.* (5)
3rd Year Civil	Civil Engineering I.	*Electrical Lab.* (9)	*Electrical Lab.* (9)	*Electrical Lab.* (8) (9)	*Design III.* (2)
3rd Year Mechanical and Electrical				*Electrical Lab.* (9)	*Heat Engines* (17)
3rd Year Chemical ..		*Design III.* (12)	*Design III.* (12)	*Design III.* (12)	*Chemistry*
4th Year Civil	*Design IV.*	*Design IV.*	Seminar.	Seminar.	*General* (1)
4th Year Mechanical and Electrical	Electrical III.	*Journals*	*Journals*	*Journals*	
4th Year Chemical ..	..	*Electrical Lab.*	*Electrical Lab.*	*Electrical Lab.*	*Heat Engines* (12)
SATURDAY—					
1st Year All	*Fitting and Machining* (3)	*Fitting and Machining* (3)	*Fitting and Machining* (3)	NOTE—	
2nd Year All	*Chemistry II.* (6)	*Chemistry II.* (6)	*Chemistry II.* (6)	(1) 1st Term Materials Testing	
3rd Year Civil	Surveying I.	*Design III.*	*Design III.*	(2) 1st Term Heat Engines Lab.	
3rd Year Mechanical and Electrical	Surveying I. (9			(3) 1st Term Drawing I.	
3rd Year Chemical ..				(4) 1st Term Design III.	
4th Year Civil	*Design IV.*	*Design IV.*	*Design IV.*	(5) 1st Term Chemistry	
4th Year Mechanical and Electrical	*Fitting and Machining*	*Fitting and Machining*	*Fitting and Machining*	(6) 1st Term General	
4th Year Chemical ..	*Design IV.*	*Design IV*	*Design IV.*	(7) 2nd Term Physics	
				(8) 2nd Term Geology	
				(9) 3rd Term Design III. (Mechanical).	
				(10) 3rd Term Heat Engines I.	
				(11) 3rd Term General	
				(12) 3rd Term Chemistry Lab.	
				(13) 3rd Term Journals	
				(14) Chemistry Lab. for exempted periods.	
				(15) Alternate Years to 3rd and 4th Year.	
				(16) Alternate weeks.	
				(17) 1st Term Design III. (Mechanical).	

FACULTY OF AGRICULTURE—TIME TABLE, 1934.

Day.	9 to 10.	10 to 11.	11 to 12.	12 to 1.	2 to 5.
MONDAY—					
1st Year ..	Technical Drawing Pure Mathematics I.	Physics I.	Biology I.	Chemistry I.	*Chemistry I.* (2-4)
2nd Year ..	*Agricultural Chemistry*	*Agricultural Chemistry*	*Agricultural Chemistry*	Agricultural Geology	*Agricultural Geology*
4th Year ..	Agricultural Chemistry	*Agricultural Chemistry*	*Agricultural Chemistry*	*Agricultural Chemistry*	*Botany III.* (2-4), (1st and 2nd terms)
TUESDAY—					
1st Year ..	..	Geology I.	*Geology I.*	*Geology I.*	Biology I. (3-5 practical)
2nd Year ..	*Botany II.*	*Entomology*	*Entomology*	*Entomology*	*Plant Pathology* (1st term) *Botany II.* (2nd and 3rd terms)
4th Year ..	Botany III. (1st and 2nd terms)	Botany III. (1st and 2nd terms)	*Botany III.* (*Systematics*) (1st and 2nd terms)	Meteorology (1st term)	*Parasitology* (1st and 2nd terms)
WEDNESDAY—					
1st Year ..	Geology I.	Physics I.	Biology I.	Chemistry I.	
2nd Year ..	Plant Pathology	*Plant Pathology*	*Plant Pathology*	*Entomology* (1st term) Botany II. (2nd and 3rd terms)	
4th Year ..	Economics	Meteorology	Agricultural Chemistry	Principles of Agriculture (1st term)	
THURSDAY—					
1st Year ..	..	Geology I.	*Chemistry I.*	*Chemistry I.*	Biology I. (3-5 practical)
2nd Year ..	*Entomology*	*Entomology*	Entomology	Agricultural Chemistry	Botany II. (practical 3-5)
4th Year ..	Agricultural Chemistry	..	..	Botany III. (1st and 2nd terms)	*Botany III.* (1st and 2nd terms)
FRIDAY—					
1st Year ..	Pure Mathematics I.	Physics I.	*Geology I.*	Chemistry I.	*Physics I.*
2nd Year ..	Plant Pathology	Entomology	Agricultural Chemistry	Agricultural Geology	*Plant Pathology*
4th Year ..	..	..	..	..	*Botany III.* (1st and 2nd terms) Economics (5 p.m.)
SATURDAY (9-12)—					
1st Year ..	*Technical Drawing*	*Technical Drawing*	*Technical Drawing*		
2nd Year ..	*Agricultural Chemistry*	*Agricultural Chemistry*	*Agricultural Chemistry*		
4th Year ..	*Agricultural Chemistry*	*Agricultural Chemistry*	*Agricultural Chemistry*		

ANNUAL EXAMINATIONS.

PARTIALLY FIXED TIME-TABLE.

DAY OF WEEK.	MORNING.	AFTERNOON.
Friday (in tenth week of third term)	English I. — First Paper English II. — First Paper	English I. — Second Paper English II. — Second Paper
Saturday (in tenth week of third term)	English I. — Third Paper English II. — Third Paper	..
Monday (*i.e.* forty-fifth Monday of year)	Philosophy I.—First Paper Philospohy II.—First Paper Chemistry I.—First Paper	Philosophy I.—Second Paper Philosophy II.—Second Paper Chemistry I.—Second Paper
Tuesday	Latin I.—First Paper Latin II. — First Paper Physics I. — First Paper	Latin I. — Second Paper Latin II. — Second Paper Physics I. — Second Paper
Wednesday	Pure Mathematics I. Pure Mathematics II. —First Paper	Geology I. Pure Mathematics II. —Second Paper
Thursday	British History I.—First Paper British History II.—First Paper Biology I. — First Paper	British History I.—Second Paper British History II.—Second Paper Biology I. — Second Paper
Friday	French I. — First Paper French II. — First Paper	French I. — Second Paper French II. — Second Paper

BIBLIOGRAPHICAL RECORD, 1933.

i.) Official Publications.

(1) Calendar of the University of Queensland for the Year 1933. Part II. Frederick Phillips, Government Printer, Brisbane. 8vo. Annual.

(2) Manual of Public Examinations of the University of Queensland for the Years 1933-34. Frederick Phillips, Government Printer. Royal 8vo. Annual.

(ii.) Publications of University Officers.

HISTORY.

H. ALCOCK, M.A., Professor of History and Economics—

Presidential Address: Section E—History.

The Administrative Side of Government, with illustrations drawn principally from the History of Queensland.

[A.N.Z.A.A.S., vol. xxi., 1932.]

CHEMISTRY.

L. S .BAGSTER, D.Sc., Professor of Chemistry—

Presidential Address: Section B—Chemistry.

Chemical Reactions.

[A.N.Z.A.A.S., vol. xxi., 1932.]

T. G. H. JONES, D.Sc., A.A.C.I., Lecturer in Chemistry.

(1) Essentials Oils from the Queensland Flora, Part IV., *Agonis Elliptica.*

[Proc. Roy. Soc. Qld., vol. xliii., pp. 73-75.]

(2) Essential Oils from the Queensland Flora, Part V., *Eriostemon Glasshousiensis.*

[Proc. Roy. Soc. Qld., vol. xliv., pp. 151-152.]

(3) Presidential Address: The Elements and their Relationship.

[Proc. Roy Soc. Qld., vol. xlv., pp. 1-9.]

GEOLOGY AND MINERALOGY.

W. H. BRYAN, M.C., D.Sc., Lecturer in Geology—

Early Palæozoic Earth Movements in Australia.

[A.N.Z.A.A.S., vol. xxi., 1932, p. 90.]

The Basis of Soil Classification.

[A.N.Z.A.A.S., vol. xxi., 1932, p. 83.]

F. W. WHITEHOUSE, M.Sc., Ph.D., Lecturer in Geology—

Some Problems of Queensland Palæo-Botany.
[Proc. Roy. Soc. Qld., vol. xliii., 1931, p. xiv.]

Notes on the Permo-Carboniferous Floras of Queensland.
[Qld. Govt. Mining Jour., vol. xxxiv., February, 1933.]

On the Presence of Glendonites in the Dawson Valley.
[Proc. Roy, Soc. Qld., vol. xliv., 1933, p. 153.]

FREDERICK PHILLIPS, Government Printer, Brisbane.